

US009038845B1

(12) **United States Patent**
Buck

(10) **Patent No.:** **US 9,038,845 B1**
(45) **Date of Patent:** **May 26, 2015**

(54) **CONTAINER LID WITH ONE OR MORE CAVITIES**

(71) Applicant: **Ronald Mark Buck**, Encinitas, CA (US)

(72) Inventor: **Ronald Mark Buck**, Encinitas, CA (US)

(73) Assignee: **TOP-THAT! LLC**, Encinitas, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/269,016**

(22) Filed: **May 2, 2014**

(51) **Int. Cl.**
B65D 51/28 (2006.01)
A47G 19/22 (2006.01)

(52) **U.S. Cl.**
CPC **B65D 51/28** (2013.01); **A47G 19/2272** (2013.01)

(58) **Field of Classification Search**
CPC B65D 51/28; B65D 51/2807
USPC 220/522, 521, 705, 708
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

| | | |
|-------------|---------|-----------------------|
| 34,976 A | 4/1862 | Nicholson |
| 36,131 A | 8/1862 | Zettle |
| 602,791 A | 4/1898 | Wurzburg |
| 674,305 A | 5/1901 | Patterson |
| 681,871 A | 9/1901 | Burdick |
| 726,321 A | 4/1903 | Mason |
| 730,903 A | 6/1903 | Gibson |
| 824,341 A | 6/1906 | Cordes |
| 873,867 A | 12/1907 | Kirkgaard |
| 930,938 A * | 8/1909 | Clement 220/521 |
| 1,002,963 A | 9/1911 | Bostwick |
| 1,331,336 A | 2/1920 | Fisher |
| 1,395,594 A | 11/1921 | Pfefferle |

| | | |
|---------------|---------|----------------------|
| 1,434,831 A | 11/1922 | Long |
| 1,441,742 A | 1/1923 | O'Brien |
| 1,482,931 A | 2/1924 | Keehn |
| 1,485,136 A | 2/1924 | House |
| 1,545,227 A | 7/1925 | Baltzley |
| 1,600,758 A | 9/1926 | Goldstein |
| 1,609,453 A | 12/1926 | Atwood |
| 1,665,289 A * | 4/1928 | Weaver 229/400 |
| 1,713,676 A | 5/1929 | Rose |

(Continued)

FOREIGN PATENT DOCUMENTS

| | | |
|----|------------|---------|
| AU | 2009250333 | 5/2009 |
| AU | 2009250333 | 11/2009 |

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 29/402,782, filed Sep. 27, 2011, Zomorodi.

(Continued)

Primary Examiner — Fenn Mathew

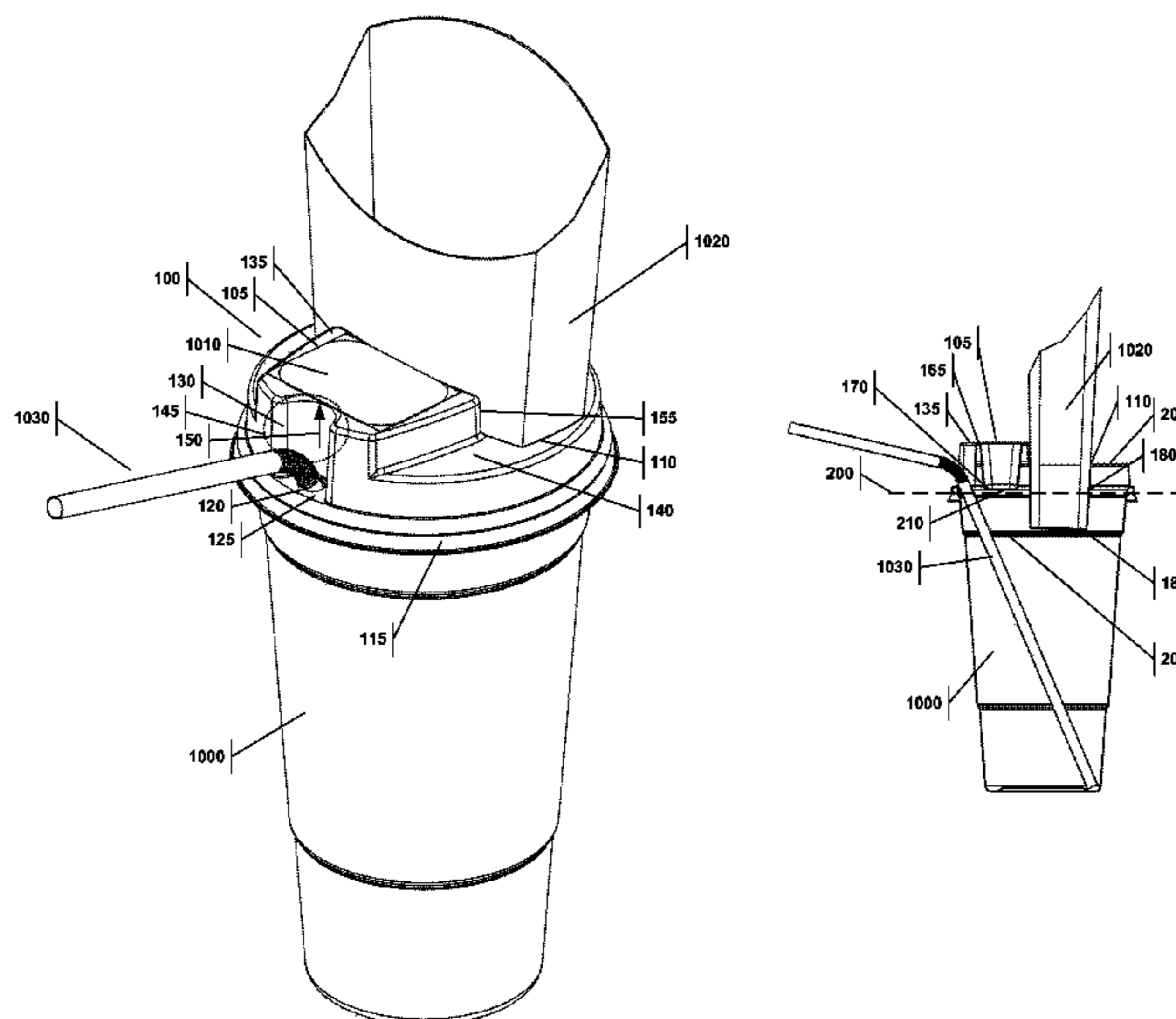
Assistant Examiner — Christopher McKinley

(74) *Attorney, Agent, or Firm* — Manuel de la Cerra

(57) **ABSTRACT**

A container lid with a first cavity is provided. The lid includes a continuous outer coupling trough for attachment of the lid to the open top of a container. The lid also includes a straw-hole planar surface with a hole for drinking a liquid in the container. A riser wall may extend away from the straw-hole planar surface and defines a first planar surface above the straw-hole planar surface. The first planar surface includes a the first cavity that has side walls connected to the first planar surface and extending from the first planar surface to a position lower than the first planar surface and a bottom connected to the side walls. A second planar surface is also disclosed that has a second cavity formed therein. The first cavity may be adapted to receive a condiment container and the second cavity to receive a food container.

14 Claims, 12 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

| | | | | | |
|---------------|---------|-------------------------------|---------------|---------|----------------------|
| 1,755,042 A | 4/1930 | Zoller | 3,425,580 A | 2/1969 | Brockhage |
| 1,773,972 A | 8/1930 | Eberhart | 3,433,378 A | 3/1969 | Ross |
| 1,862,620 A | 6/1932 | Graham | 3,439,841 A | 4/1969 | Irving |
| 1,948,920 A | 2/1934 | Johnson | 3,447,710 A | 6/1969 | Blair |
| 1,965,713 A | 7/1934 | Shaw | 3,456,860 A | 7/1969 | Janninck |
| 1,985,181 A | 12/1934 | Matthews | 3,495,733 A | 2/1970 | Davis |
| 1,985,258 A | 12/1934 | Mauser | 3,514,029 A * | 5/1970 | Powell 206/223 |
| 1,985,998 A | 1/1935 | Koch et al. | 3,515,306 A | 6/1970 | Roper et al. |
| 2,003,657 A | 6/1935 | Stabblefield | 3,532,244 A | 10/1970 | Yates, Jr. |
| 2,015,028 A | 9/1935 | Gillette | 3,557,995 A | 1/1971 | Mirasol, Jr. et al. |
| 2,045,480 A | 6/1936 | Magnesen et al. | 3,561,668 A | 2/1971 | Bergstrom |
| 2,050,487 A | 8/1936 | Durrant | 3,580,468 A | 5/1971 | McDevitt |
| 2,120,403 A | 6/1938 | Godfrey | 3,598,271 A | 8/1971 | Holley |
| 2,121,843 A | 6/1938 | Vaughn | 3,603,473 A | 9/1971 | Winberg |
| 2,142,590 A | 1/1939 | Smith | 3,606,262 A | 9/1971 | Hoff |
| 2,148,468 A | 2/1939 | Hothersall | 3,616,897 A | 11/1971 | Vrana |
| 2,174,618 A | 10/1939 | Burdick | 3,616,955 A | 11/1971 | Heffran |
| 2,191,705 A | 2/1940 | Chamberlain | 3,624,787 A | 11/1971 | Newman |
| 2,205,685 A | 6/1940 | Conner | 3,674,512 A | 7/1972 | Andros |
| 2,241,044 A | 5/1941 | Knut | 3,679,089 A | 7/1972 | Swett et al. |
| 2,271,589 A | 2/1942 | Hendrickson | 3,696,987 A | 10/1972 | Schuff |
| 2,276,678 A | 3/1942 | Wheeler | D226,063 S | 1/1973 | Warnberg |
| 2,327,077 A | 8/1943 | Teetor | 3,734,276 A | 5/1973 | Bank |
| 2,328,543 A | 9/1943 | Bauman | 3,743,520 A * | 7/1973 | Croner 426/87 |
| 2,339,343 A | 1/1944 | Magnesen | 3,745,055 A | 7/1973 | Gorman |
| 2,374,092 A | 4/1945 | Glaser | 3,746,158 A | 7/1973 | Connick |
| 2,375,643 A | 5/1945 | Sermanotta | 3,765,559 A | 10/1973 | Sauey |
| 2,421,356 A | 5/1947 | Saffady | 3,768,688 A | 10/1973 | Linke |
| 2,461,908 A | 2/1949 | Magnesen | 3,769,056 A | 10/1973 | Sincock |
| 2,484,039 A | 10/1949 | Krueger | 3,770,156 A | 11/1973 | Yates, Jr. |
| 2,545,979 A | 3/1951 | Tregear | 3,774,797 A | 11/1973 | Vliet |
| 2,649,984 A | 8/1953 | Abt | 3,784,052 A | 1/1974 | Edwards |
| 2,665,023 A | 1/1954 | Migneault | 3,792,893 A | 2/1974 | Grotnes |
| 2,671,572 A | 3/1954 | Staz | 3,796,813 A | 3/1974 | Kurland |
| 2,748,976 A | 6/1956 | Magnesen | 3,797,696 A | 3/1974 | Dibrell |
| 2,753,050 A | 7/1956 | Langston | 3,806,023 A | 4/1974 | Barnett |
| 2,760,674 A | 8/1956 | Karp | 3,815,281 A | 6/1974 | Kander |
| 2,766,796 A | 10/1956 | Tupper | 3,817,419 A | 6/1974 | Moller et al. |
| 2,816,687 A | 12/1957 | Phillips | 3,820,684 A | 6/1974 | Harrison |
| 2,920,804 A | 1/1960 | Minton | 3,822,030 A | 7/1974 | Tanzer |
| 2,965,496 A * | 12/1960 | Serdar 426/120 | 3,858,756 A | 1/1975 | Fulton |
| 2,977,019 A | 3/1961 | Henchert | 3,868,043 A | 2/1975 | Freemyer |
| 2,982,440 A | 5/1961 | Harrison | 3,874,554 A | 4/1975 | Chang |
| 3,045,859 A * | 7/1962 | McMahon 220/521 | 3,877,581 A | 4/1975 | Auxer |
| 3,045,887 A | 7/1962 | Caine | 3,880,288 A | 4/1975 | Hunter |
| 3,064,800 A | 11/1962 | Hart | 3,910,414 A | 10/1975 | McCay |
| 3,070,275 A * | 12/1962 | Bostrom 229/4.5 | 3,942,679 A | 3/1976 | Starr |
| 3,071,281 A | 1/1963 | Sawai | RE28,797 E | 5/1976 | Brewer |
| 3,085,710 A | 4/1963 | McIlroy | 3,963,140 A | 6/1976 | Harding |
| 3,138,432 A | 6/1964 | Kleinhans | 3,974,931 A | 8/1976 | Moller |
| RE25,618 E | 7/1964 | Goodman | 4,003,488 A | 1/1977 | Moller |
| 3,157,335 A | 11/1964 | Maier | 4,007,936 A | 2/1977 | Hornsby, Jr. |
| 3,163,308 A | 12/1964 | Friedell | 4,009,805 A | 3/1977 | Klygis et al. |
| 3,170,591 A | 2/1965 | Ullman et al. | 4,018,355 A | 4/1977 | Ando |
| 3,185,341 A | 5/1965 | Barbour | 4,027,779 A | 6/1977 | De Long |
| 3,187,919 A | 6/1965 | Inglis | 4,036,392 A * | 7/1977 | Martin 220/521 |
| 3,194,468 A | 7/1965 | Baron | 4,049,122 A | 9/1977 | Maxwell |
| 3,244,420 A | 4/1966 | Poynter | 4,054,205 A | 10/1977 | Blow, Jr. et al. |
| 3,245,691 A | 4/1966 | Gorman | 4,056,210 A | 11/1977 | Boyle |
| 3,269,734 A | 8/1966 | Ottogy | 4,074,827 A | 2/1978 | Labe, III |
| 3,285,462 A | 11/1966 | Bulmer et al. | 4,091,953 A | 5/1978 | Daenen |
| 3,288,344 A * | 11/1966 | Woollen et al. 229/103.1 | 4,106,660 A | 8/1978 | Boyle |
| 3,323,706 A * | 6/1967 | Gereke 206/217 | 4,119,239 A | 10/1978 | Anderson |
| 3,325,048 A | 6/1967 | Edwards | 4,141,462 A | 2/1979 | Rucci |
| 3,327,895 A | 6/1967 | Mueller | 4,146,157 A | 3/1979 | Dixon et al. |
| 3,349,941 A | 10/1967 | Wanderer | 4,183,444 A | 1/1980 | English |
| 3,369,687 A | 2/1968 | Walls | 4,183,446 A | 1/1980 | Davis |
| 3,384,265 A | 5/1968 | Frank | 4,186,842 A | 2/1980 | Albert |
| 3,397,867 A | 8/1968 | Hoff | 4,206,845 A | 6/1980 | Christian |
| 3,401,825 A | 9/1968 | Weiss | 4,234,100 A | 11/1980 | Chabot |
| 3,413,128 A | 11/1968 | Steinbarth et al. | 4,264,007 A | 4/1981 | Hunt |
| 3,420,399 A | 1/1969 | Heisler | 4,279,353 A | 7/1981 | Honma |
| 3,421,653 A | 1/1969 | Whaley | 4,318,500 A | 3/1982 | Melikian |
| 3,421,654 A | 1/1969 | Gunter | 4,340,138 A | 7/1982 | Bernhardt |
| 3,421,681 A | 1/1969 | Frank | 4,350,260 A | 9/1982 | Prueher |
| | | | 4,380,307 A | 4/1983 | Stillinger |
| | | | 4,389,802 A | 6/1983 | McLaren et al. |
| | | | 4,390,113 A | 6/1983 | Bird |
| | | | 4,407,426 A | 10/1983 | McLaren et al. |

(56)

References Cited

U.S. PATENT DOCUMENTS

| | | | | | | | |
|-----------|---|-----------|---------------------------|-----------|---|-----------|------------------------|
| 4,423,822 | A | 1/1984 | Powalowski | 5,318,787 | A | 6/1994 | Brauner |
| 4,438,865 | A | 3/1984 | Scattaregia | 5,325,982 | A | 7/1994 | Cobb, Jr. |
| 4,441,623 | A | 4/1984 | Antoniak | 5,346,070 | A | 9/1994 | McSpadden |
| 4,446,969 | A | 5/1984 | Tyler | 5,346,095 | A | 9/1994 | Deal |
| 4,458,584 | A | 7/1984 | Annese et al. | 5,366,089 | A | 11/1994 | Parker |
| 4,478,346 | A | 10/1984 | Spong | 5,366,104 | A | 11/1994 | Armstrong |
| 4,487,114 | A | 12/1984 | Abdenour | 5,375,828 | A | 12/1994 | Shikami |
| 4,489,848 | A | 12/1984 | Braude | 5,377,860 | A | 1/1995 | Littlejohn et al. |
| 4,491,220 | A | 1/1985 | Daviss | 5,381,901 | A | 1/1995 | Hundley |
| 4,503,992 | A | 3/1985 | Sitko et al. | 5,385,255 | A | 1/1995 | Varano et al. |
| 4,518,096 | A | 5/1985 | Winstead | D355,735 | S | 2/1995 | Shaffer et al. |
| 4,564,116 | A | 1/1986 | Prohaska | 5,388,729 | A | 2/1995 | Gerringer |
| 4,566,605 | A | * 1/1986 | Rogers 220/712 | 5,390,798 | A | 2/1995 | Yanuzzi |
| 4,589,569 | A | 5/1986 | Clements | 5,392,949 | A | 2/1995 | McKenna |
| D285,656 | S | 9/1986 | Champion | 5,393,258 | A | 2/1995 | Karterman |
| 4,619,372 | A | 10/1986 | McFarland | 5,397,023 | A | 3/1995 | Toczek et al. |
| 4,625,890 | A | 12/1986 | Galer | 5,402,903 | A | 4/1995 | Mann |
| 4,627,537 | A | 12/1986 | Rogers | D358,294 | S | 5/1995 | Letica |
| 4,629,084 | A | 12/1986 | Hackelsberger | 5,415,312 | A | 5/1995 | Mueller |
| D289,720 | S | 5/1987 | Maher | 5,417,364 | A | 5/1995 | Shaw |
| D290,323 | S | 6/1987 | Weernink | 5,429,262 | A | 7/1995 | Sharkey |
| 4,699,299 | A | 10/1987 | Gach | 5,431,276 | A | 7/1995 | Lialin |
| 4,717,037 | A | 1/1988 | Van der Meulen | D361,469 | S | 8/1995 | Young |
| 4,718,788 | A | 1/1988 | Briscoe | 5,441,164 | A | 8/1995 | Beck et al. |
| 4,728,003 | A | 3/1988 | Davey | 5,449,089 | A | 9/1995 | Turner |
| 4,732,274 | A | 3/1988 | Bouton | D362,801 | S | 10/1995 | Milroy |
| 4,735,337 | A | 4/1988 | Von Holdt | 5,464,150 | A | 11/1995 | Porres Sanchez et al. |
| 4,738,373 | A | 4/1988 | DeParales | 5,489,026 | A | 2/1996 | D'Aloia |
| D296,874 | S | 7/1988 | Dallas | 5,490,609 | A | 2/1996 | Lane et al. |
| D297,799 | S | 9/1988 | Hammer | 5,503,858 | A | 4/1996 | Reskow |
| 4,782,976 | A | 11/1988 | Kenyon, II | D370,412 | S | 6/1996 | Rohrer |
| 4,785,931 | A | * 11/1988 | Weir et al. 206/222 | 5,524,788 | A | 6/1996 | Plester |
| 4,789,076 | A | 12/1988 | Jewitt et al. | 5,524,817 | A | 6/1996 | Meier et al. |
| 4,795,052 | A | 1/1989 | Hayes, Jr. | 5,529,179 | A | 6/1996 | Hanson |
| 4,807,776 | A | 2/1989 | Cortopassi | 5,531,347 | A | 7/1996 | Goulding |
| 4,823,958 | A | 4/1989 | Mahmud | 5,538,154 | A | 7/1996 | Von Holdt |
| D303,194 | S | 9/1989 | Darby et al. | 5,540,333 | A | 7/1996 | Gonzalez et al. |
| 4,872,569 | A | 10/1989 | Bolte | 5,540,349 | A | 7/1996 | Philips |
| 4,872,586 | A | 10/1989 | Landis | D372,866 | S | 8/1996 | Ahern, Jr. |
| 4,877,151 | A | 10/1989 | Rush et al. | 5,542,532 | A | 8/1996 | Mitchell |
| 4,901,881 | A | 2/1990 | McElroy | 5,573,131 | A | * 11/1996 | Berjis 220/4.03 |
| 4,906,158 | A | 3/1990 | Dewitt et al. | 5,573,133 | A | 11/1996 | Park |
| 4,938,373 | A | 7/1990 | McKee | D376,311 | S | * 12/1996 | Burton D9/761 |
| 4,944,102 | A | 7/1990 | Behlendorf et al. | 5,587,192 | A | 12/1996 | Beizermann |
| 4,966,294 | A | 10/1990 | Mack | 5,592,766 | A | 1/1997 | Mygatt |
| 4,971,211 | A | 11/1990 | Lake | 5,593,062 | A | 1/1997 | Martin |
| D318,427 | S | 7/1991 | Sherburne, Jr. | 5,624,053 | A | 4/1997 | Freek et al. |
| 5,027,972 | A | * 7/1991 | Bartholomew 220/526 | 5,641,063 | A | 6/1997 | Gambardella et al. |
| 5,035,320 | A | 7/1991 | Pione | 5,647,499 | A | 7/1997 | Piazza |
| 5,046,632 | A | 9/1991 | Bordner | D381,866 | S | 8/1997 | St. Gelais |
| 5,052,553 | A | 10/1991 | DeSanctis | 5,657,898 | A | 8/1997 | Portman et al. |
| 5,054,642 | A | 10/1991 | Yoshida | D383,944 | S | 9/1997 | Lillelund |
| 5,058,737 | A | 10/1991 | Patterson et al. | 5,662,240 | A | 9/1997 | Norris |
| 5,060,820 | A | 10/1991 | Boerner | D384,580 | S | 10/1997 | Fernandes et al. |
| 5,064,082 | A | 11/1991 | Lombardi et al. | 5,678,720 | A | 10/1997 | Van Melle |
| D323,116 | S | 1/1992 | Dart et al. | 5,685,449 | A | 11/1997 | Oblak |
| 5,085,330 | A | 2/1992 | Paulin | 5,695,052 | A | 12/1997 | Damato |
| 5,090,584 | A | 2/1992 | Roberts et al. | 5,695,084 | A | 12/1997 | Chmela et al. |
| D324,973 | S | 3/1992 | Stagerman | 5,697,509 | A | 12/1997 | Hayes |
| 5,099,232 | A | 3/1992 | Howes | 5,699,927 | A | 12/1997 | Lane et al. |
| 5,137,210 | A | 8/1992 | Hibbs | 5,705,210 | A | 1/1998 | Sillince et al. |
| 5,145,646 | A | 9/1992 | Tyranski | 5,713,463 | A | 2/1998 | Lakoski et al. |
| 5,176,283 | A | 1/1993 | Patterson et al. | 5,720,555 | A | 2/1998 | Elele |
| 5,180,079 | A | * 1/1993 | Jeng 220/705 | 5,722,558 | A | * 3/1998 | Thompson 220/521 |
| D334,958 | S | 4/1993 | Fischer | 5,725,117 | A | 3/1998 | Berjis |
| 5,207,743 | A | 5/1993 | Costarella et al. | 5,725,122 | A | 3/1998 | Murphy et al. |
| 5,234,125 | A | 8/1993 | Roberts | 5,727,678 | A | 3/1998 | Chen |
| 5,240,136 | A | 8/1993 | Patterson et al. | D393,397 | S | 4/1998 | Lillelund |
| D339,027 | S | 9/1993 | Mack | 5,743,423 | A | 4/1998 | Franco |
| 5,246,133 | A | 9/1993 | James | 5,746,312 | A | * 5/1998 | Johnson 206/217 |
| 5,249,700 | A | 10/1993 | Dumke | 5,769,263 | A | 6/1998 | Willingham et al. |
| 5,283,140 | A | 2/1994 | Netz et al. | 5,775,570 | A | * 7/1998 | Kim 229/4.5 |
| 5,292,028 | A | 3/1994 | Patterson et al. | D397,911 | S | 9/1998 | Waldmann |
| 5,294,000 | A | 3/1994 | Yanuzzi | 5,806,707 | A | 9/1998 | Boehm et al. |
| 5,310,072 | A | 5/1994 | Matusovsky et al. | 5,829,583 | A | 11/1998 | VerWeyst et al. |
| | | | | 5,839,601 | A | 11/1998 | Van Melle |
| | | | | 5,875,957 | A | 3/1999 | Yocum |
| | | | | 5,894,952 | A | 4/1999 | Mendenhall et al. |
| | | | | 5,904,266 | A | 5/1999 | Tedeschi |

(56)

References Cited

U.S. PATENT DOCUMENTS

| | | | | | | | |
|-----------|------|---------|-------------------------------|--------------|------|---------|------------------------------|
| 5,911,331 | A | 6/1999 | Boller | 7,588,275 | B2 | 9/2009 | Borg |
| 5,934,493 | A | 8/1999 | Han | 7,594,584 | B2 | 9/2009 | Durdon et al. |
| 5,947,319 | A | 9/1999 | Sinski | 7,699,216 | B2 | 4/2010 | Smith et al. |
| 5,954,195 | A | 9/1999 | Krueger et al. | 7,721,911 | B2 | 5/2010 | Chou |
| 5,971,195 | A | 10/1999 | Reidinger et al. | D625,139 | S | 10/2010 | Petlak |
| 5,979,647 | A | 11/1999 | Han | 7,832,586 | B2 | 11/2010 | Vovan |
| 5,984,131 | A | 11/1999 | Krueger | 7,866,502 | B2 | 1/2011 | Maxwell |
| 5,992,061 | A | 11/1999 | Fleck et al. | D635,855 | S | 4/2011 | Smith et al. |
| D417,845 | S | 12/1999 | Sadlier et al. | D637,079 | S | 5/2011 | Brown et al. |
| 5,996,832 | A | 12/1999 | Nieuwoudt | 7,942,260 | B1 * | 5/2011 | Rodriguez 206/217 |
| 6,003,671 | A | 12/1999 | McDonough et al. | D643,284 | S | 8/2011 | Zomorodi |
| 6,065,628 | A | 5/2000 | Page | D643,285 | S | 8/2011 | Zomorodi |
| 6,079,586 | A | 6/2000 | Hanneman | D643,286 | S | 8/2011 | Zomorodi |
| 6,079,587 | A | 6/2000 | Vogt | 8,006,854 | B2 | 8/2011 | Waugh |
| 6,085,919 | A | 7/2000 | Singer | D648,629 | S | 11/2011 | Zomorodi |
| 6,109,518 | A | 8/2000 | Mueller et al. | 8,109,404 | B2 | 2/2012 | Chmela |
| 6,112,891 | A | 9/2000 | Wohl et al. | 8,141,727 | B2 | 3/2012 | Gruenwald et al. |
| 6,119,884 | A | 9/2000 | Lowry | 8,317,024 | B1 * | 11/2012 | Persi 206/508 |
| 6,119,889 | A | 9/2000 | Fujii et al. | 8,381,935 | B1 * | 2/2013 | Buck 220/254.4 |
| 6,119,930 | A | 9/2000 | Lunstra et al. | 8,448,801 | B2 * | 5/2013 | Rusnak et al. 220/23.86 |
| 6,164,485 | A * | 12/2000 | Hilton 220/521 | 8,590,730 | B2 | 11/2013 | Buck |
| 6,176,390 | B1 * | 1/2001 | Kemp 220/712 | 8,596,491 | B2 * | 12/2013 | Buck 220/709 |
| 6,202,542 | B1 | 3/2001 | Melton | 8,695,845 | B2 | 4/2014 | Buck |
| 6,209,234 | B1 | 4/2001 | Meyers | 8,701,914 | B1 | 4/2014 | Buck |
| 6,209,748 | B1 | 4/2001 | Dunbar | 8,708,181 | B2 | 4/2014 | Buck |
| 6,230,969 | B1 | 5/2001 | Spransy | 8,714,393 | B2 | 5/2014 | Buck |
| 6,263,923 | B1 | 7/2001 | Castillo | 8,783,506 | B2 * | 7/2014 | Lee 220/705 |
| 6,296,141 | B1 | 10/2001 | Lukacevic | 8,800,801 | B2 * | 8/2014 | Freeman 220/521 |
| 6,299,014 | B1 | 10/2001 | Nava et al. | 2001/0035417 | A1 | 11/2001 | Kantor |
| 6,311,860 | B1 * | 11/2001 | Reidinger et al. 220/521 | 2002/0037378 | A1 | 3/2002 | Littlejohn et al. |
| 6,311,865 | B1 | 11/2001 | Laurent | 2002/0125262 | A1 | 9/2002 | Canfield |
| 6,314,866 | B1 | 11/2001 | Melton | 2002/0148833 | A1 | 10/2002 | Simon |
| D453,107 | S | 1/2002 | Wyslotsky et al. | 2003/0024930 | A1 | 2/2003 | Smith et al. |
| 6,338,417 | B1 * | 1/2002 | Ferraro 220/23.83 | 2003/0089714 | A1 | 5/2003 | Dart et al. |
| 6,354,190 | B1 | 3/2002 | Haydon | 2003/0102312 | A1 | 6/2003 | Horner |
| 6,360,885 | B1 | 3/2002 | Krueger | 2003/0111468 | A1 | 6/2003 | Kao |
| 6,364,102 | B1 | 4/2002 | Gordon et al. | 2003/0178433 | A1 | 9/2003 | Adams |
| 6,375,023 | B1 | 4/2002 | Lecinski et al. | 2004/0035867 | A1 | 2/2004 | Schultz et al. |
| 6,382,449 | B1 | 5/2002 | Kazmierski et al. | 2004/0050724 | A1 | 3/2004 | Grul et al. |
| 6,394,297 | B1 | 5/2002 | Nance | 2004/0050847 | A1 * | 3/2004 | Yoon 220/212 |
| 6,412,526 | B2 | 7/2002 | Castillo | 2004/0060934 | A1 | 4/2004 | Haynes et al. |
| 6,425,480 | B1 | 7/2002 | Krueger et al. | 2004/0084452 | A1 | 5/2004 | Hsieh |
| 6,427,864 | B1 * | 8/2002 | Asselin 220/709 | 2004/0089662 | A1 | 5/2004 | Smith et al. |
| 6,464,099 | B1 | 10/2002 | Portman et al. | 2004/0149755 | A1 * | 8/2004 | Olivar 220/212 |
| 6,471,119 | B2 | 10/2002 | Cai | 2004/0182862 | A1 * | 9/2004 | Scott 220/212 |
| 6,474,494 | B1 * | 11/2002 | Miller 220/379 | 2004/0262323 | A1 * | 12/2004 | Cha 220/709 |
| 6,488,173 | B2 | 12/2002 | Milan | 2005/0035011 | A1 | 2/2005 | McRobbie |
| 6,528,105 | B1 | 3/2003 | Gerhart et al. | 2005/0051549 | A1 | 3/2005 | Nelson |
| D473,463 | S | 4/2003 | Armstrong | 2005/0082305 | A1 | 4/2005 | Dais |
| 6,557,698 | B2 | 5/2003 | Gordon | 2005/0103794 | A1 | 5/2005 | Liu |
| 6,641,854 | B2 | 11/2003 | Gerhart | 2005/0115845 | A1 | 6/2005 | Cho |
| 6,648,164 | B1 | 11/2003 | DeCola et al. | 2005/0178677 | A1 | 8/2005 | Morrow |
| 6,652,435 | B1 | 11/2003 | Sand | 2005/0178688 | A1 | 8/2005 | Hasson |
| 6,679,397 | B2 | 1/2004 | Smith et al. | 2005/0199639 | A1 | 9/2005 | Tucker et al. |
| 6,706,297 | B1 * | 3/2004 | Toth et al. 426/120 | 2005/0205437 | A1 | 9/2005 | Huffman et al. |
| 6,708,735 | B1 * | 3/2004 | Kenihan 141/18 | 2005/0269328 | A1 | 12/2005 | Crider et al. |
| 6,726,946 | B1 | 4/2004 | Smith | 2006/0000842 | A1 | 1/2006 | Maxwell |
| 6,766,902 | B1 | 7/2004 | Hartelius | 2006/0060589 | A1 | 3/2006 | Lee |
| 6,793,075 | B1 | 9/2004 | Jeter | 2006/0091143 | A1 | 5/2006 | Chantalat |
| 6,814,250 | B1 * | 11/2004 | Madsen 220/212 | 2006/0096983 | A1 | 5/2006 | Patterson |
| 6,860,397 | B1 | 3/2005 | Walters, Jr. | 2006/0124648 | A1 | 6/2006 | Croft et al. |
| 6,915,901 | B2 | 7/2005 | Feinberg et al. | 2006/0151414 | A1 | 7/2006 | Mullen |
| D508,819 | S | 8/2005 | Mangla | 2007/0029322 | A1 | 2/2007 | Durdon et al. |
| 6,932,231 | B2 * | 8/2005 | Haynes et al. 220/212 | 2007/0068949 | A1 | 3/2007 | Crossley |
| 7,063,229 | B2 * | 6/2006 | Westerhof et al. 220/506 | 2007/0181581 | A1 | 8/2007 | Ross |
| 7,111,748 | B2 * | 9/2006 | Cha 220/4.27 | 2007/0241105 | A1 * | 10/2007 | Nielsen 220/23.4 |
| 7,159,732 | B2 | 1/2007 | Smith et al. | 2007/0278122 | A1 * | 12/2007 | McCumber et al. 206/514 |
| 7,175,042 | B2 | 2/2007 | Durdon | 2008/0023503 | A1 | 1/2008 | Freeman |
| 7,182,242 | B2 * | 2/2007 | Cai 229/400 | 2008/0099481 | A1 | 5/2008 | D'Amato |
| 7,217,434 | B1 * | 5/2007 | Loh et al. 426/115 | 2008/0230541 | A1 | 9/2008 | Bayss et al. |
| D559,035 | S | 1/2008 | Hayes | 2008/0302802 | A1 | 12/2008 | Ramsden |
| 7,341,754 | B1 | 3/2008 | Loh | 2009/0065377 | A1 | 3/2009 | Olomi et al. |
| 7,387,063 | B2 | 6/2008 | Vu et al. | 2009/0206089 | A1 | 8/2009 | Mueller |
| D590,662 | S | 4/2009 | Cheng | 2009/0236305 | A1 | 9/2009 | Demarco et al. |
| 7,568,586 | B2 | 8/2009 | Walters, Jr. | 2009/0250479 | A1 | 10/2009 | Kaufman et al. |
| | | | | 2009/0272390 | A1 | 11/2009 | Blondeel |
| | | | | 2009/0283526 | A1 | 11/2009 | Pierce et al. |
| | | | | 2010/0038273 | A1 | 2/2010 | Johnson |
| | | | | 2010/0108703 | A1 | 5/2010 | French |

(56)

References Cited

U.S. PATENT DOCUMENTS

2010/0187247 A1 7/2010 Ziegler
 2010/0320213 A1 12/2010 Kelly et al.
 2011/0114643 A1 5/2011 Bogdziewicz
 2011/0168719 A1 7/2011 Lotterhos
 2011/0198351 A1 8/2011 D Amato
 2011/0198355 A1 8/2011 Mullen
 2011/0210126 A1* 9/2011 Vovan 220/574
 2011/0248033 A1 10/2011 Mehrvijeh
 2011/0266295 A1 11/2011 Yacktman
 2011/0272656 A1 11/2011 Attwood
 2011/0284537 A1* 11/2011 Cerasani 220/212
 2011/0303678 A1 12/2011 Zomorodi
 2011/0309093 A1* 12/2011 Buck 220/711
 2012/0138608 A1 6/2012 Rusnak et al.
 2012/0165170 A1 6/2012 Wischusen, III
 2012/0187126 A1 7/2012 Shemesh
 2012/0248116 A1 10/2012 Smyers et al.
 2012/0273500 A1* 11/2012 Yao 220/521
 2013/0068772 A1* 3/2013 Durdon et al. 220/521
 2013/0068773 A1 3/2013 Buck
 2013/0068774 A1 3/2013 Buck
 2013/0119065 A1* 5/2013 Buck 220/523
 2013/0228486 A1 9/2013 Buck
 2014/0203025 A1* 7/2014 Riggan et al. 220/575

FOREIGN PATENT DOCUMENTS

EP 0064047 A1 4/1982
 EP 0162024 A2 11/1985

EP 2205309 12/1988
 EP 0447693 A1 9/1991
 EP 1397986 3/2004
 FR 2649080 6/1989
 FR 2704209 10/1994
 GB 1060389 3/1967
 GB 2322289 8/1998
 GB 2375531 11/2002
 JP 04102557 4/1992
 RU 2118281 8/1998
 WO 2006029441 3/2006
 WO 2009140727 11/2009
 WO 2012033472 3/2012

OTHER PUBLICATIONS

International Search Report and Written Opinion issued in PCT/US2012/054032 on Mar. 19, 2013.
 International Search Report and Written Opinion issued in PCT/US2013/029188 on Jul. 11, 2013.
 International Search Report and Written Opinion issued in PCT/US2013/070630 on Mar. 13, 2014.
 International Search Report and Written Opinion issued in PCT/US2013/070632 on Mar. 13, 2014.
 International Preliminary Report on Patentability issued in PCT/US2012/054032 on Mar. 20, 2014.
 Prodekspo 2012: TM "Zelenaya Soya" razdelnaya upakovka dlya napitkov, Feb. 16, 2012, retrieved online on Jun. 11, 2013, retrieved from the internet <http://news.unipak.ru38718comments>.

* cited by examiner

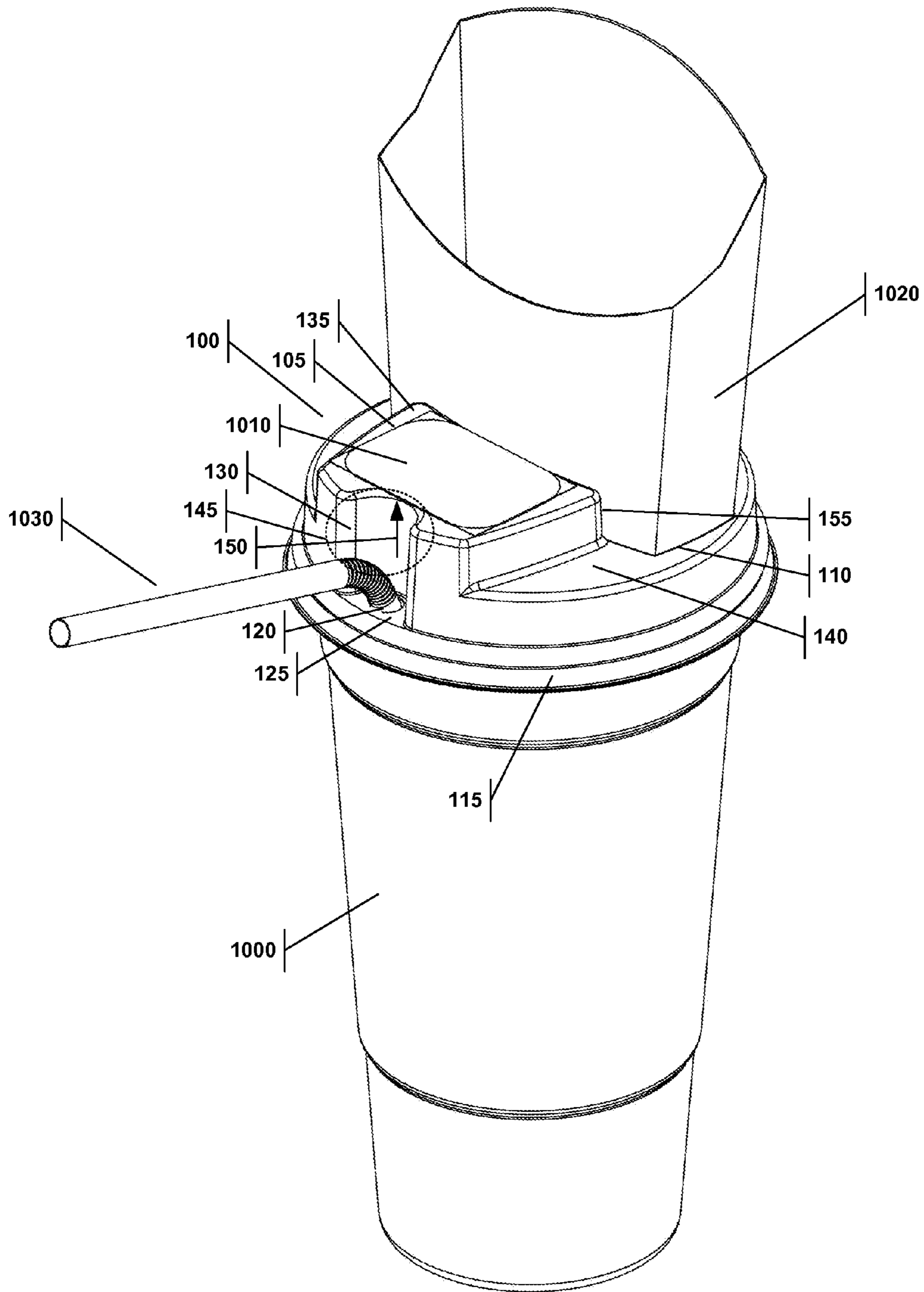


FIGURE 1

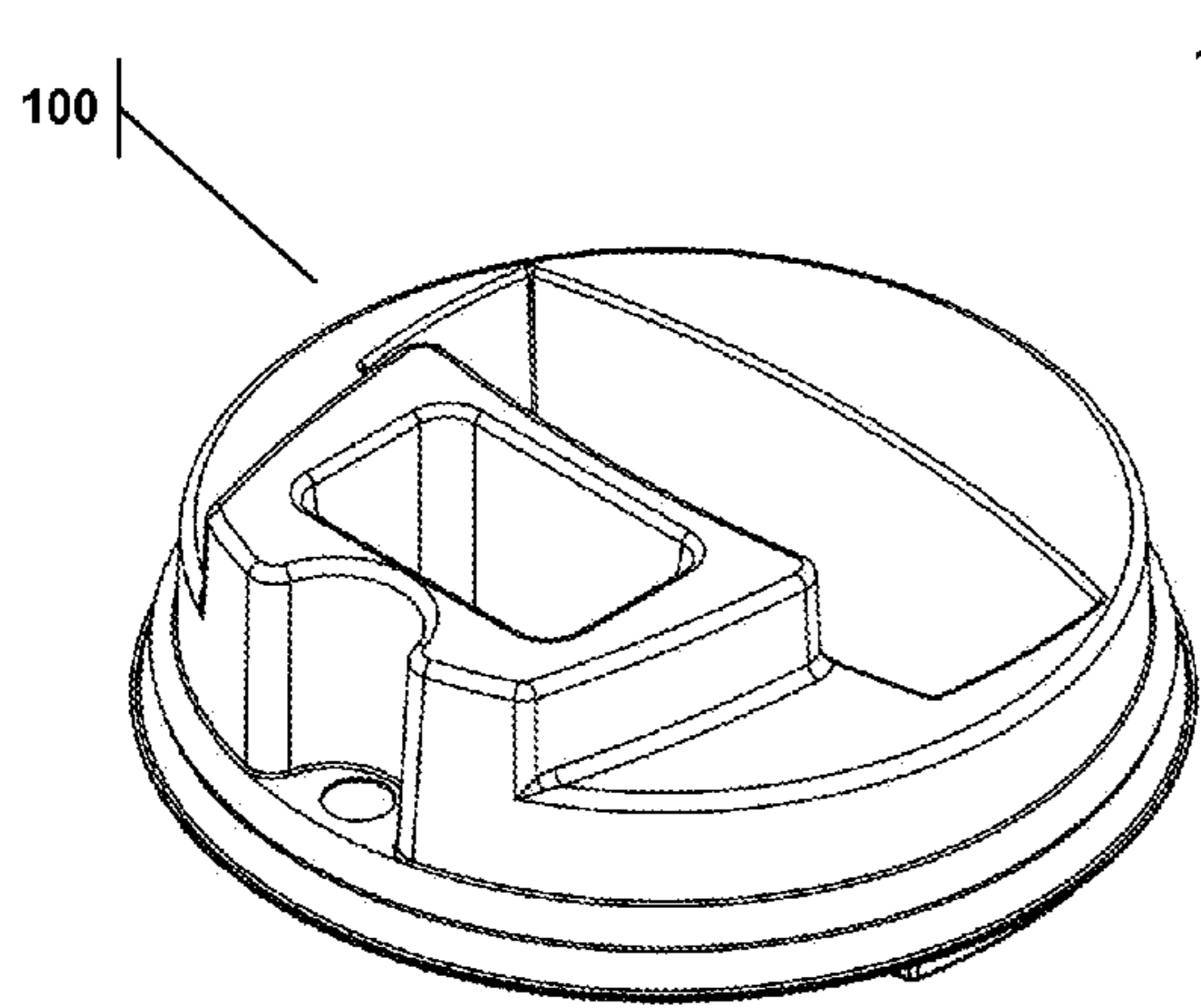


FIGURE 2A

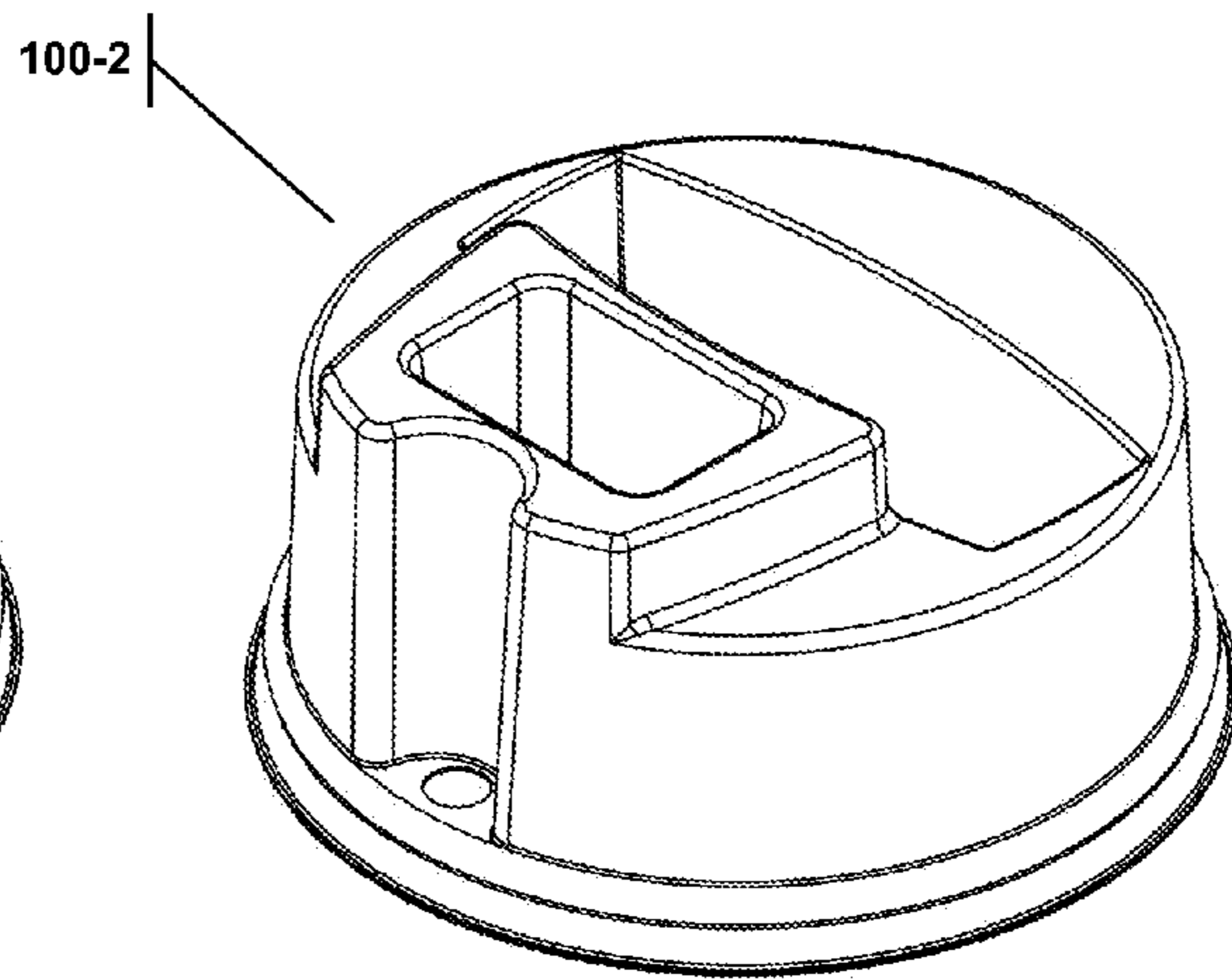


FIGURE 2B

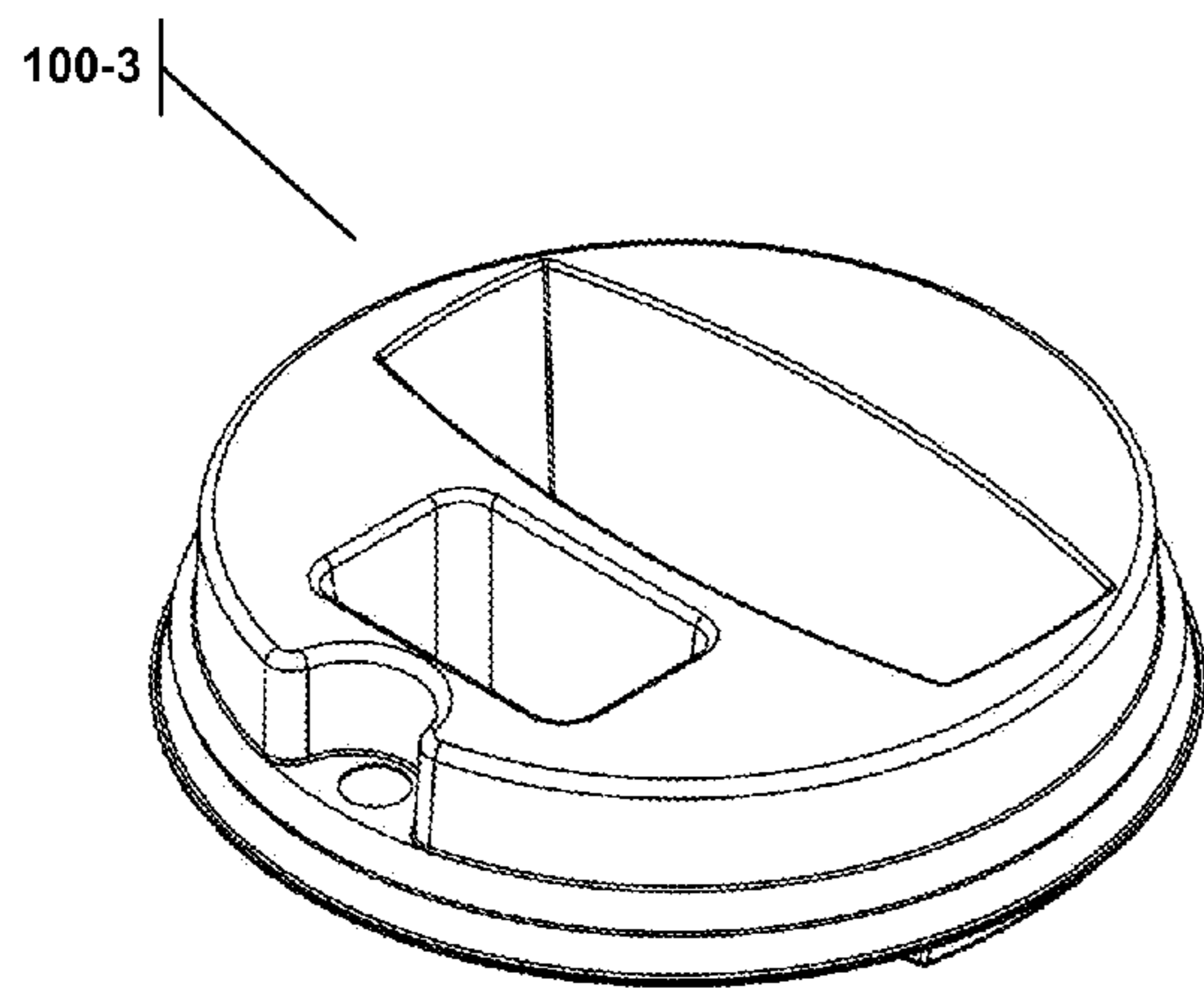


FIGURE 2C

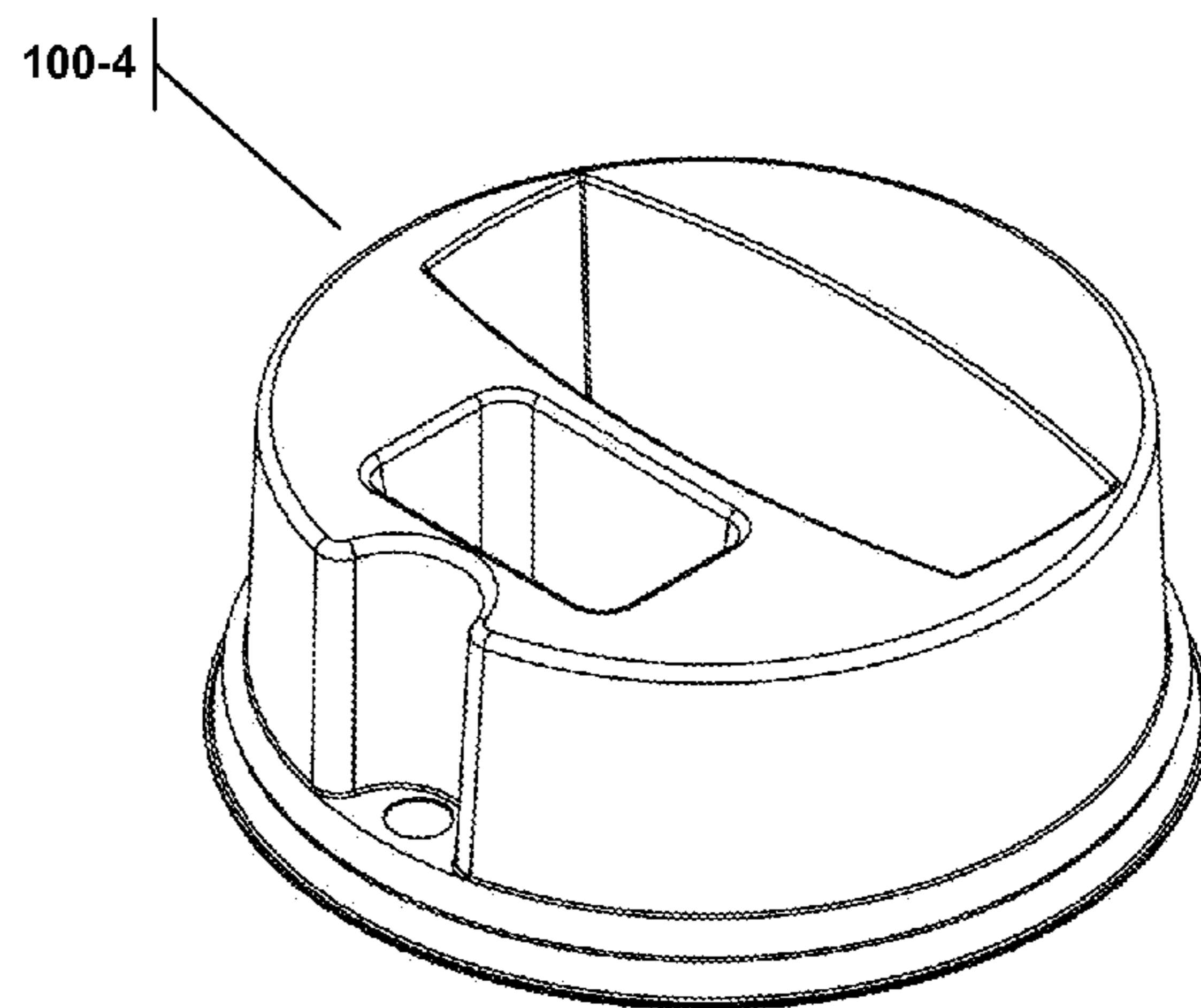


FIGURE 2D

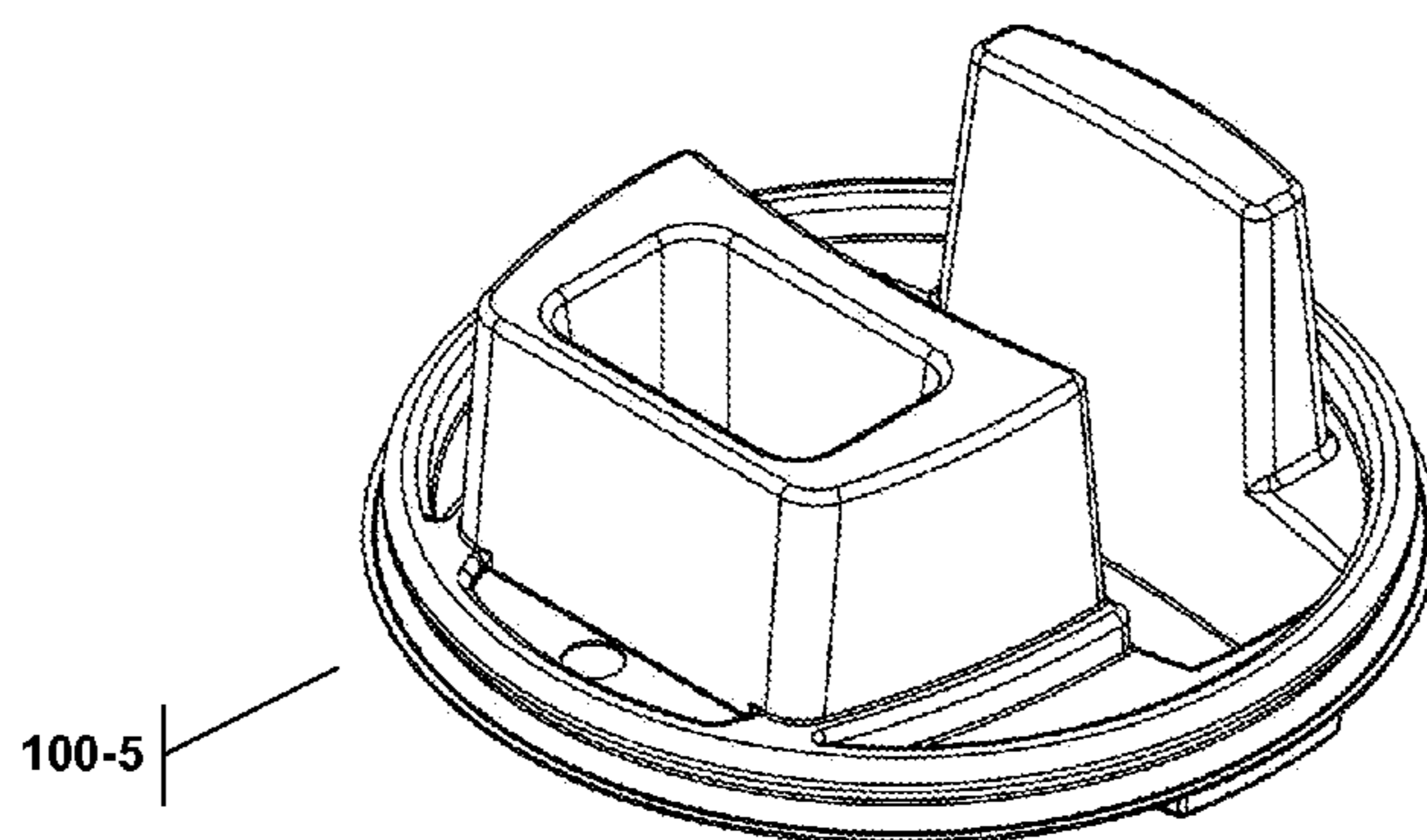


FIGURE 2E

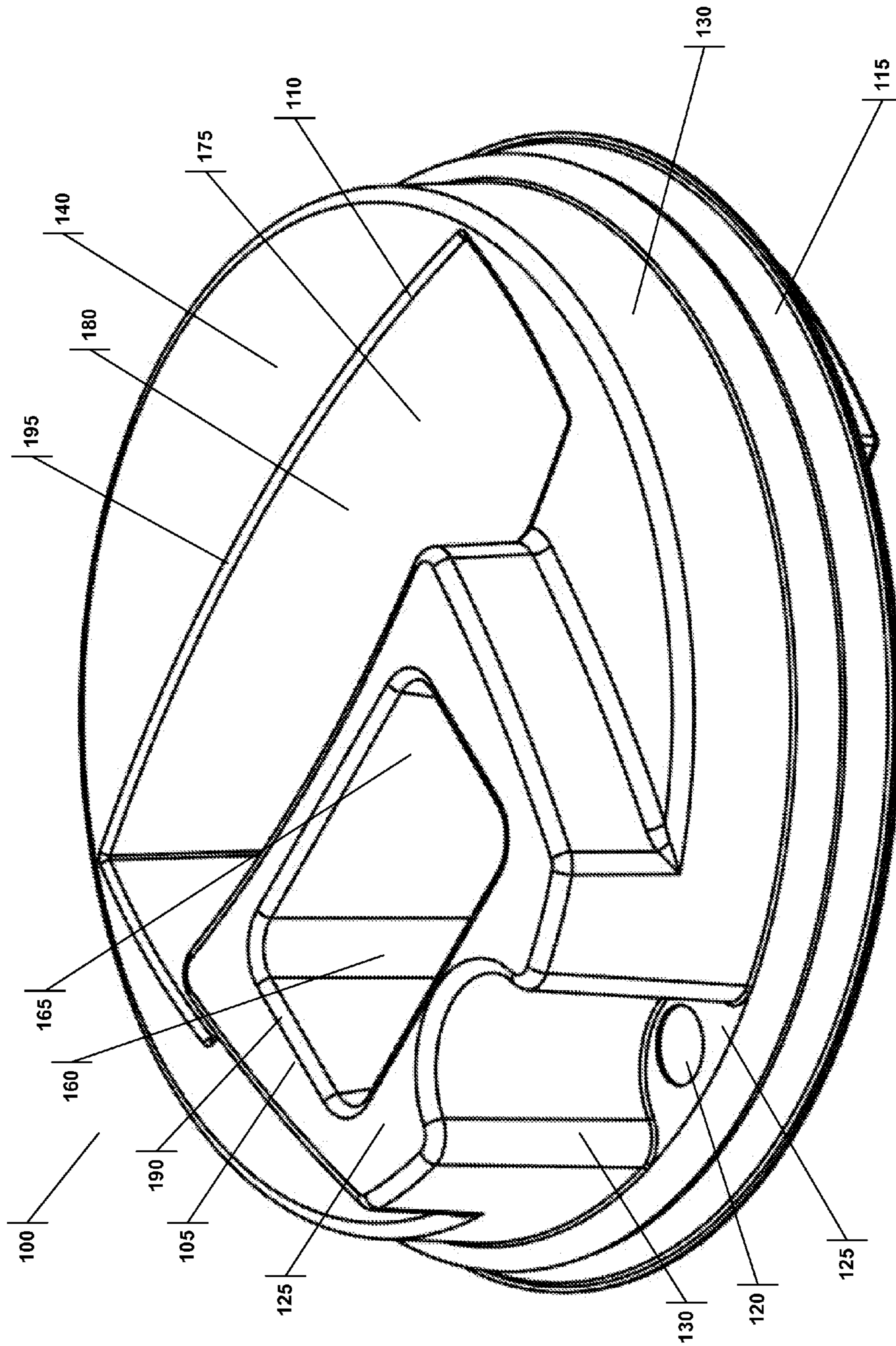


FIGURE 3A

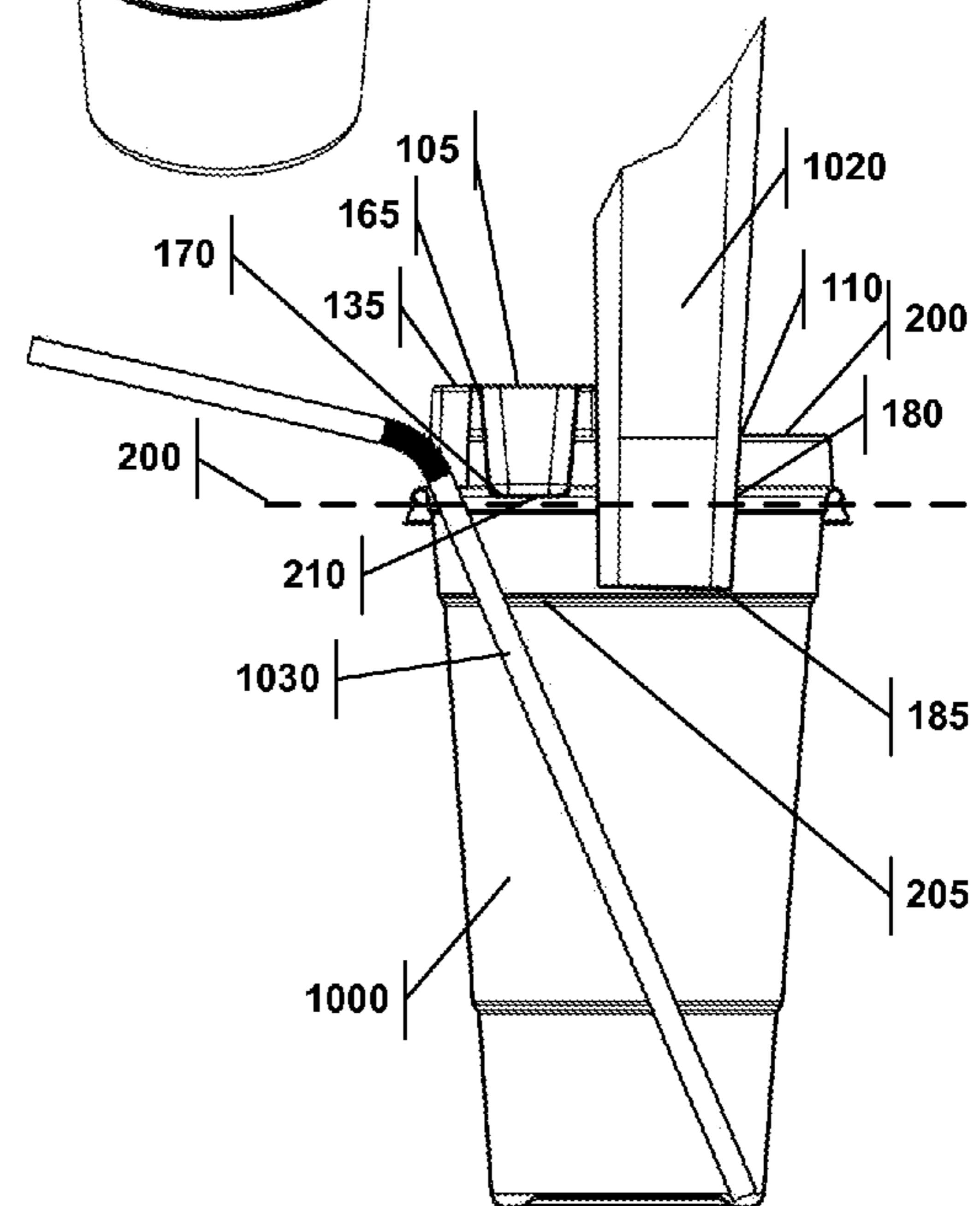
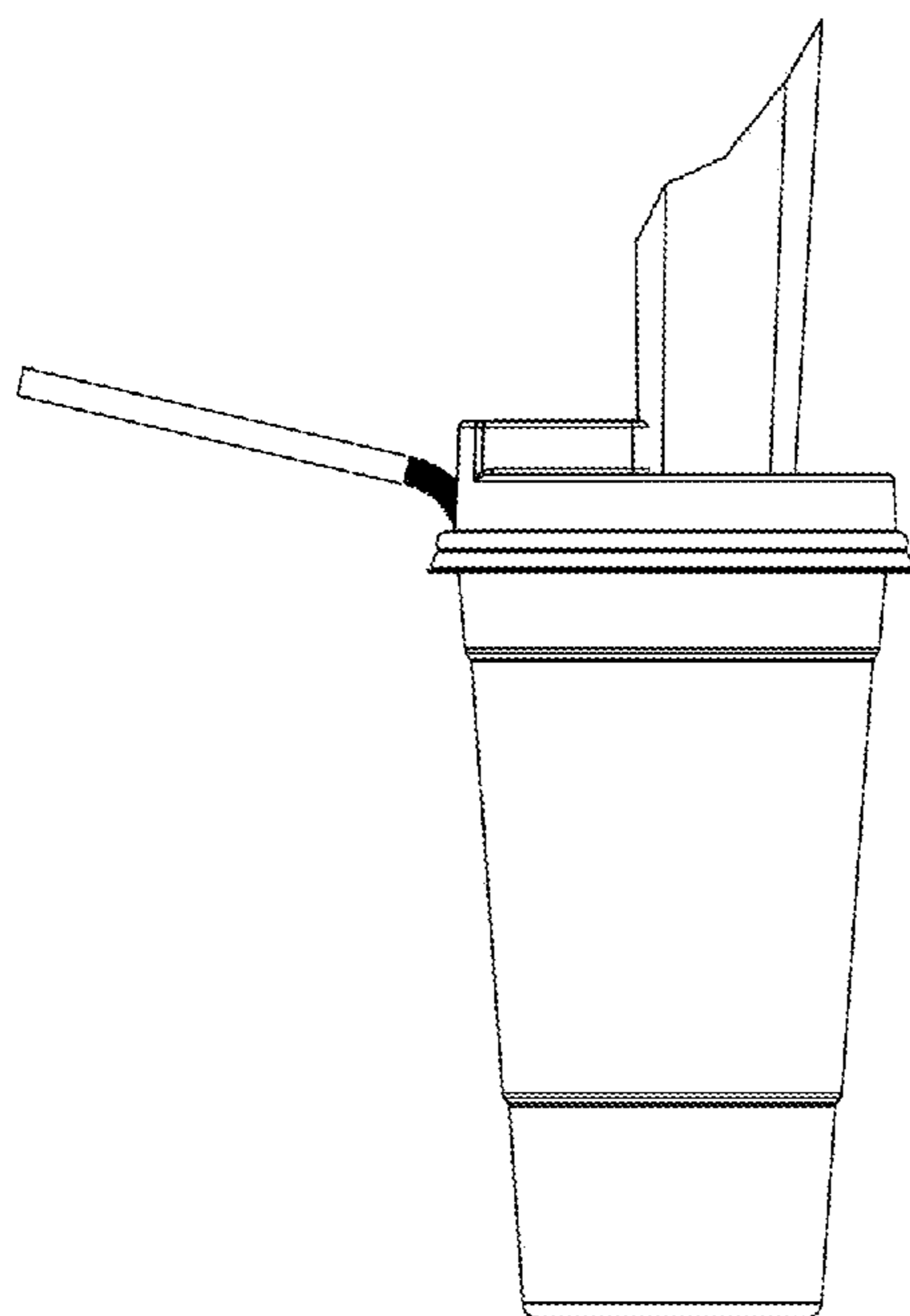
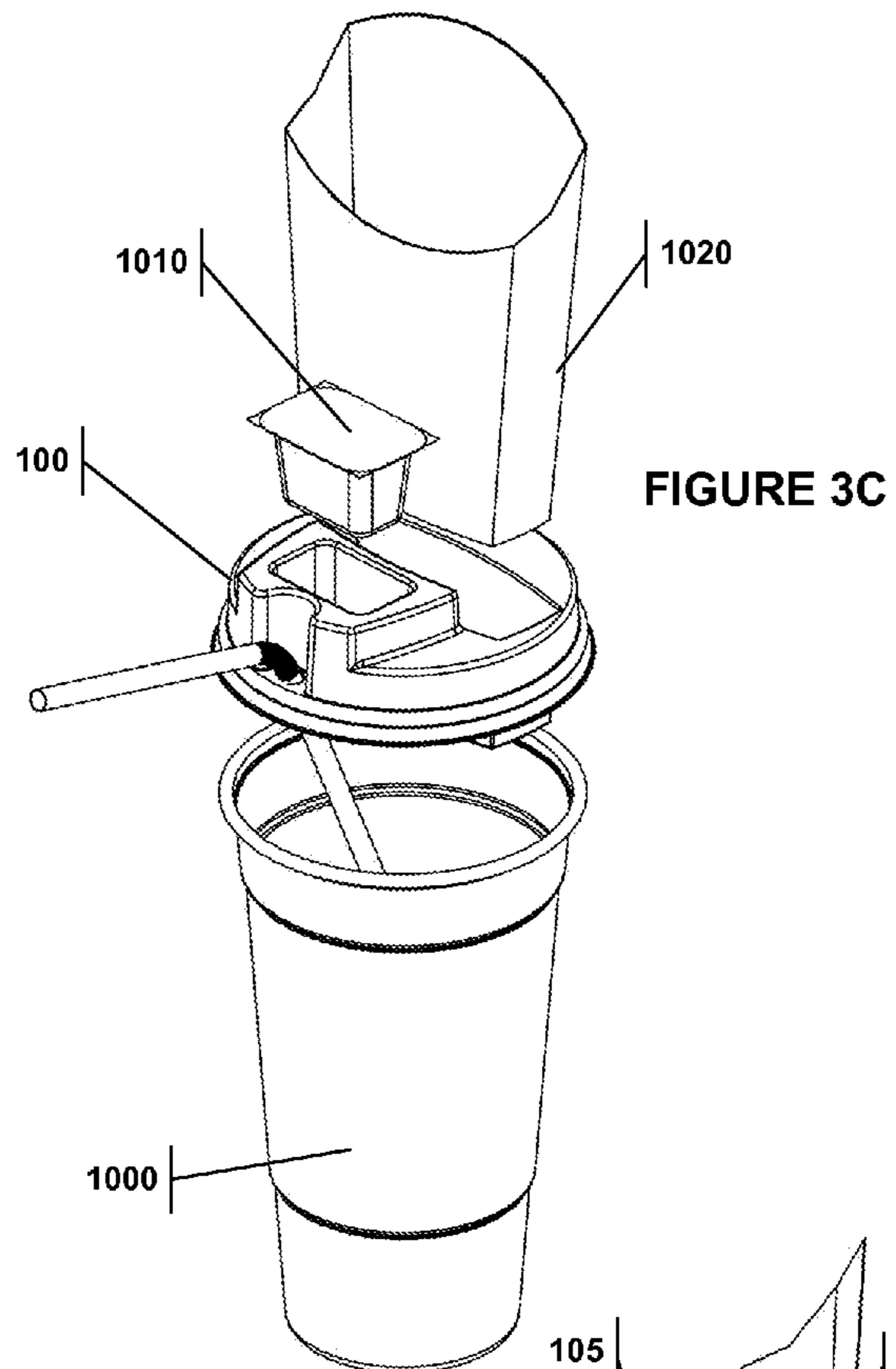
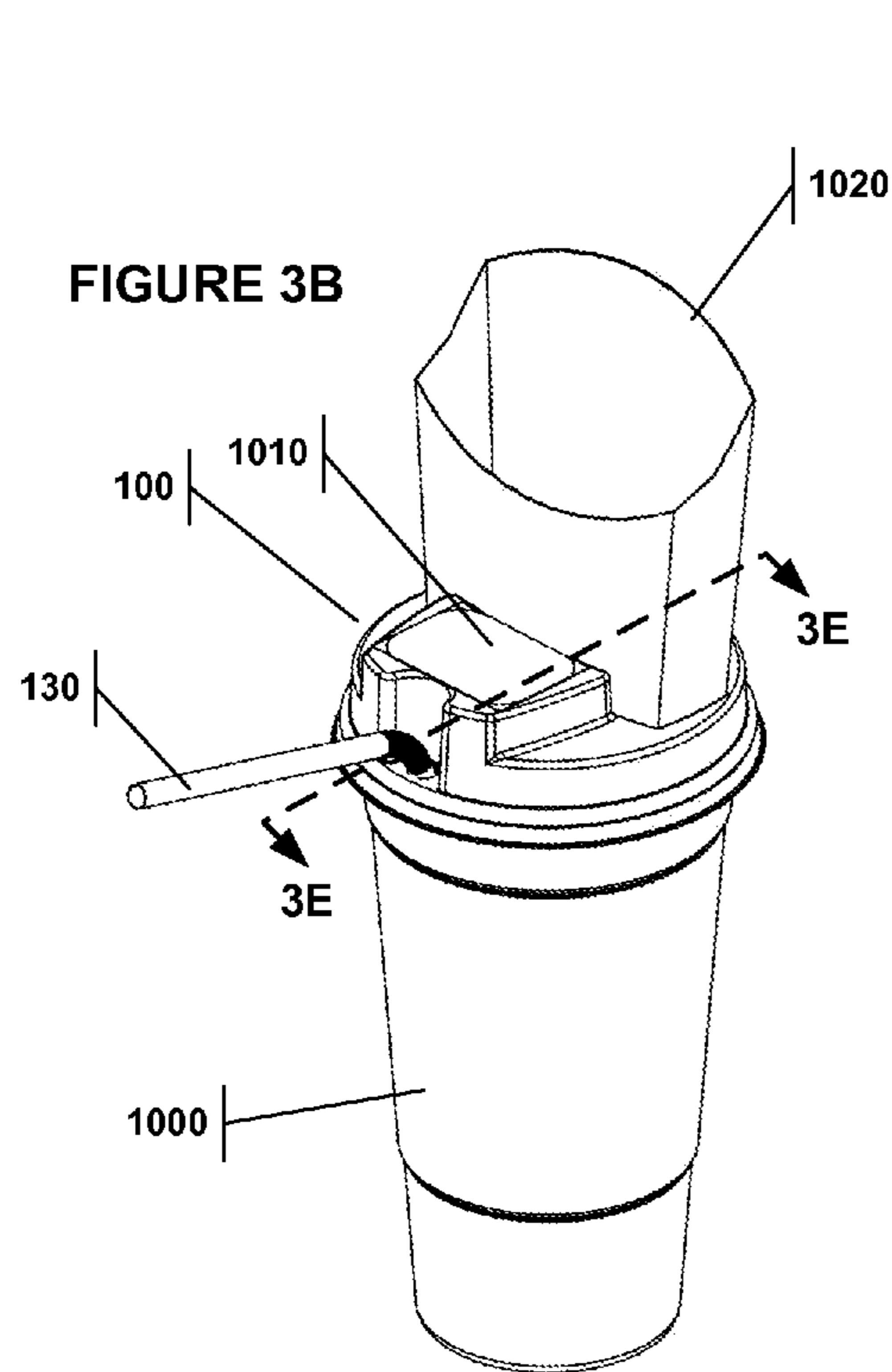


FIGURE 3D

**FIGURE 3E
(Line 3E-3E)**

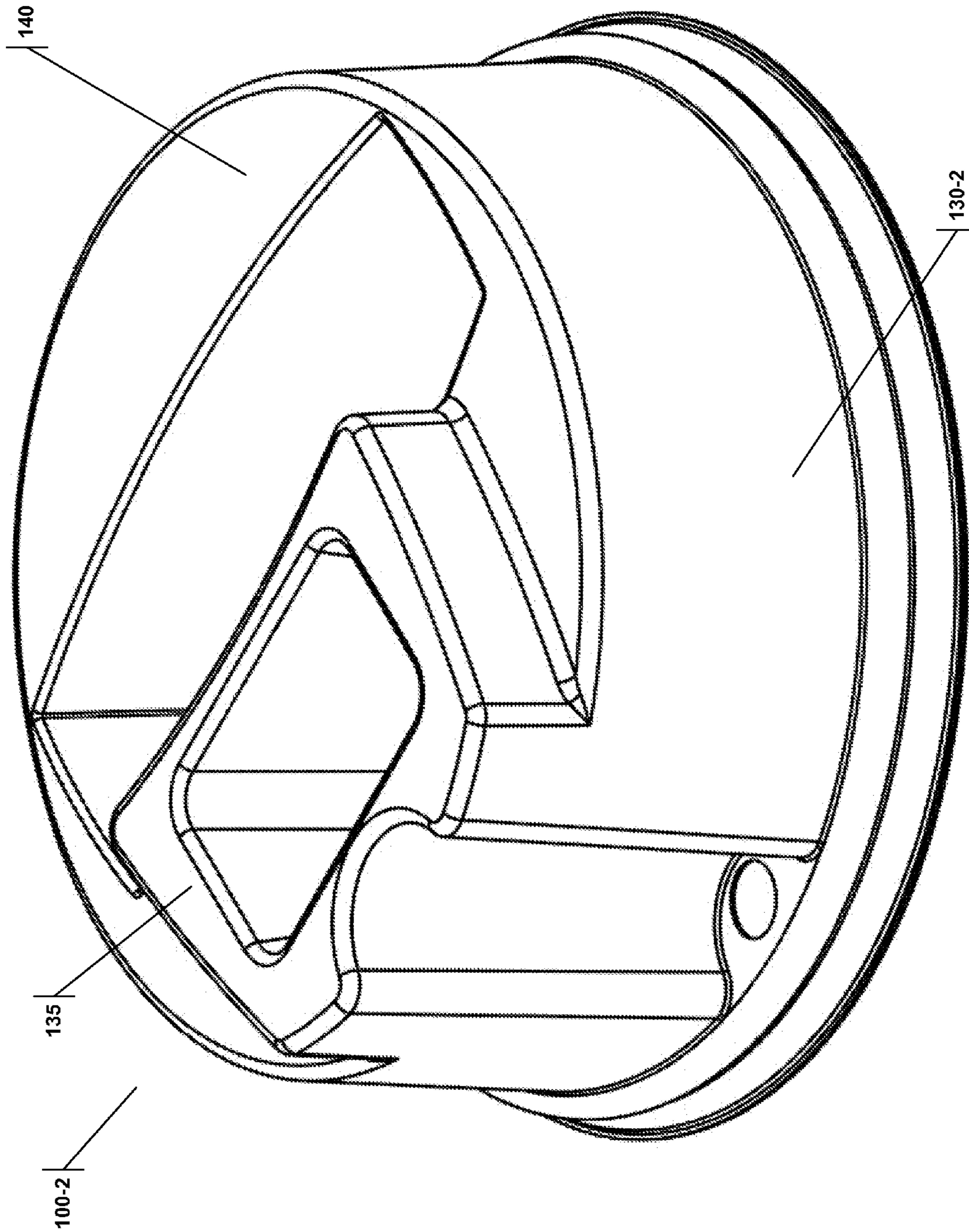


FIGURE 4A

FIGURE 4B

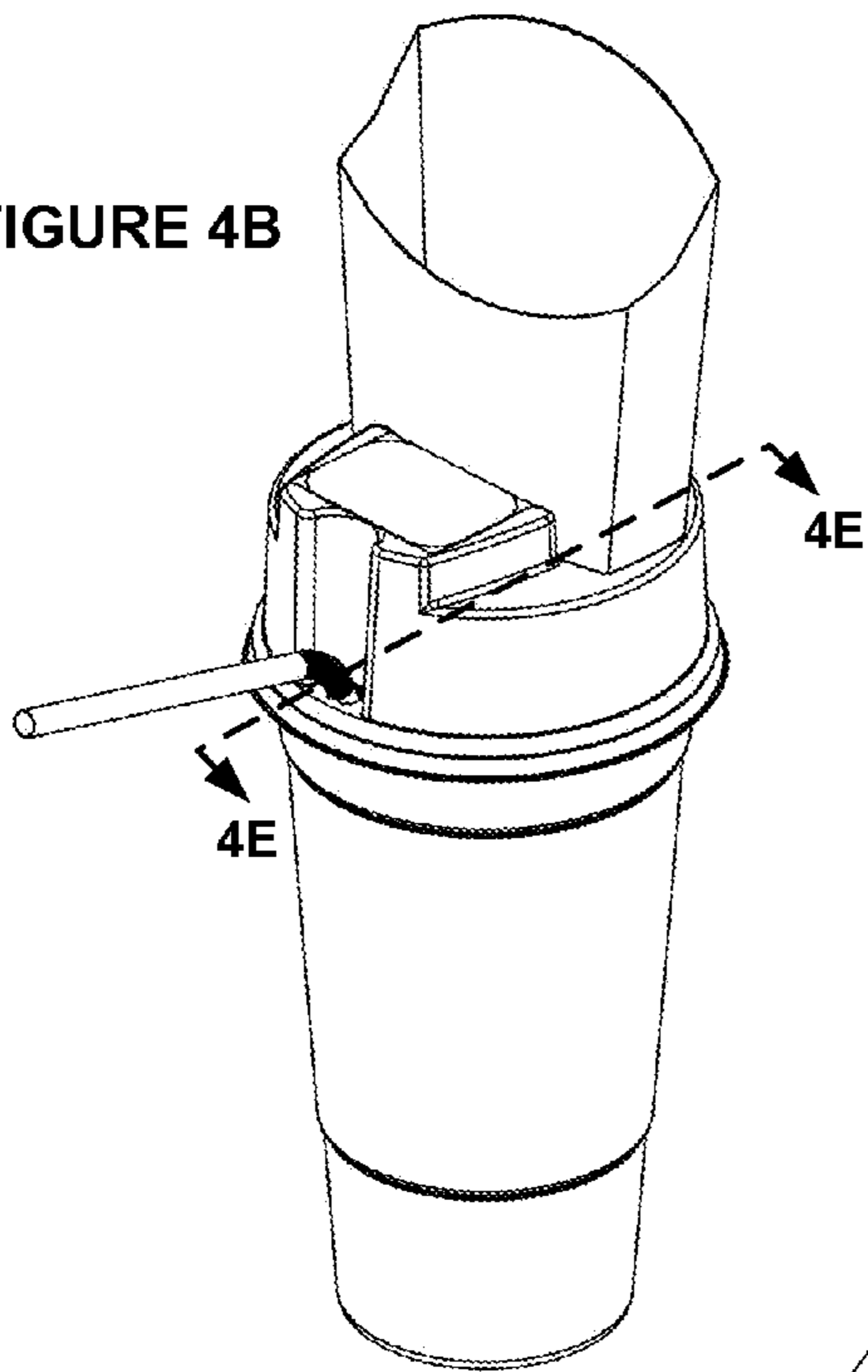


FIGURE 4C

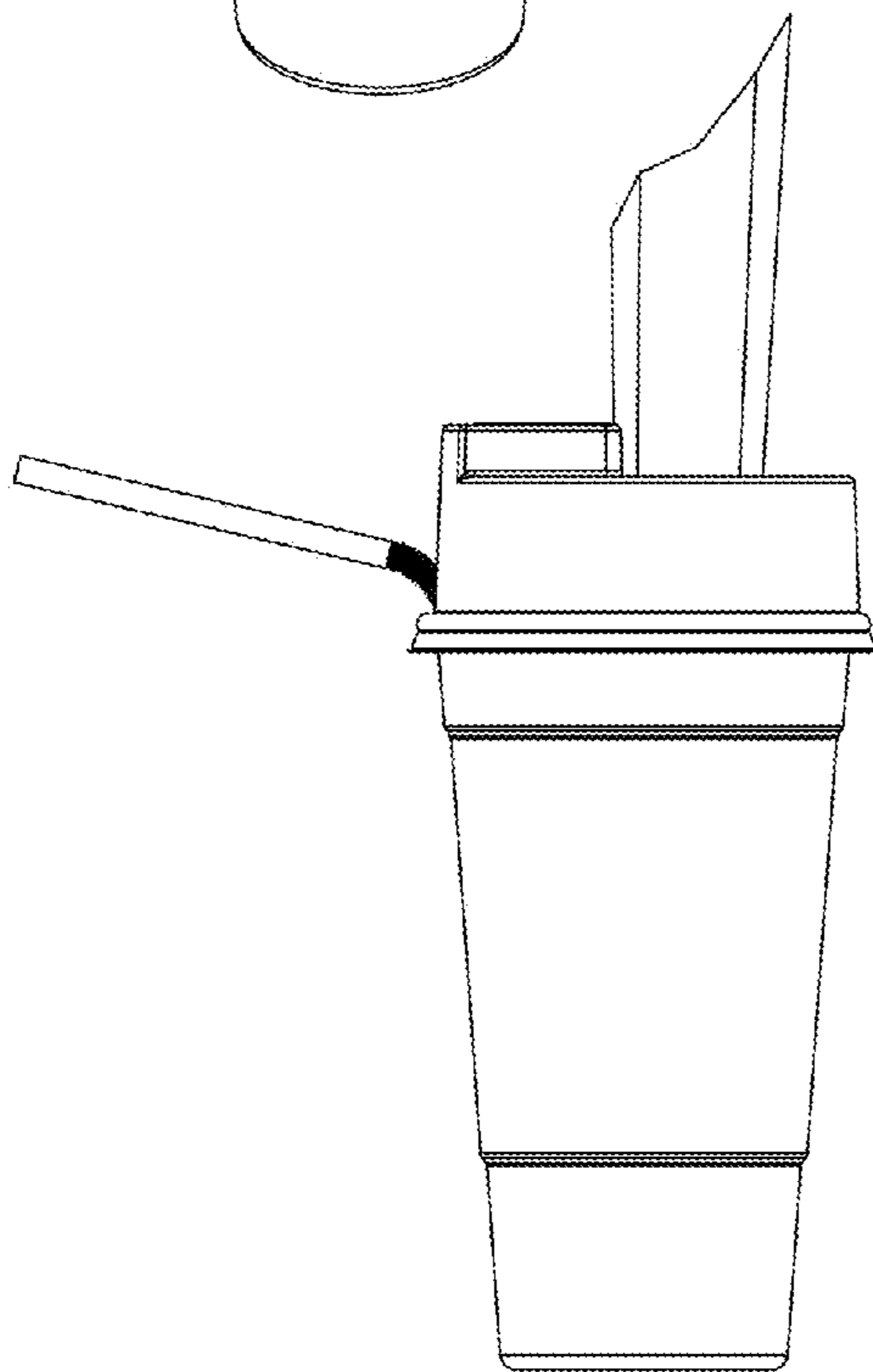
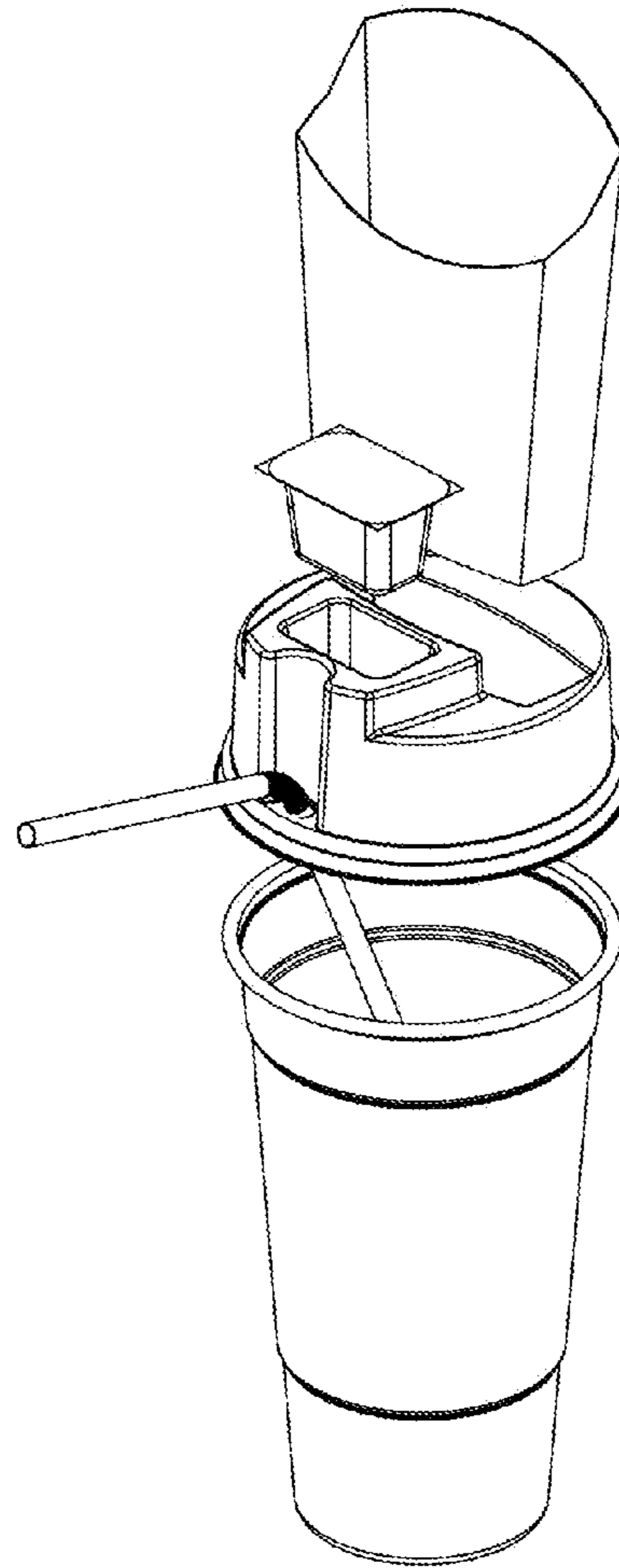


FIGURE 4D

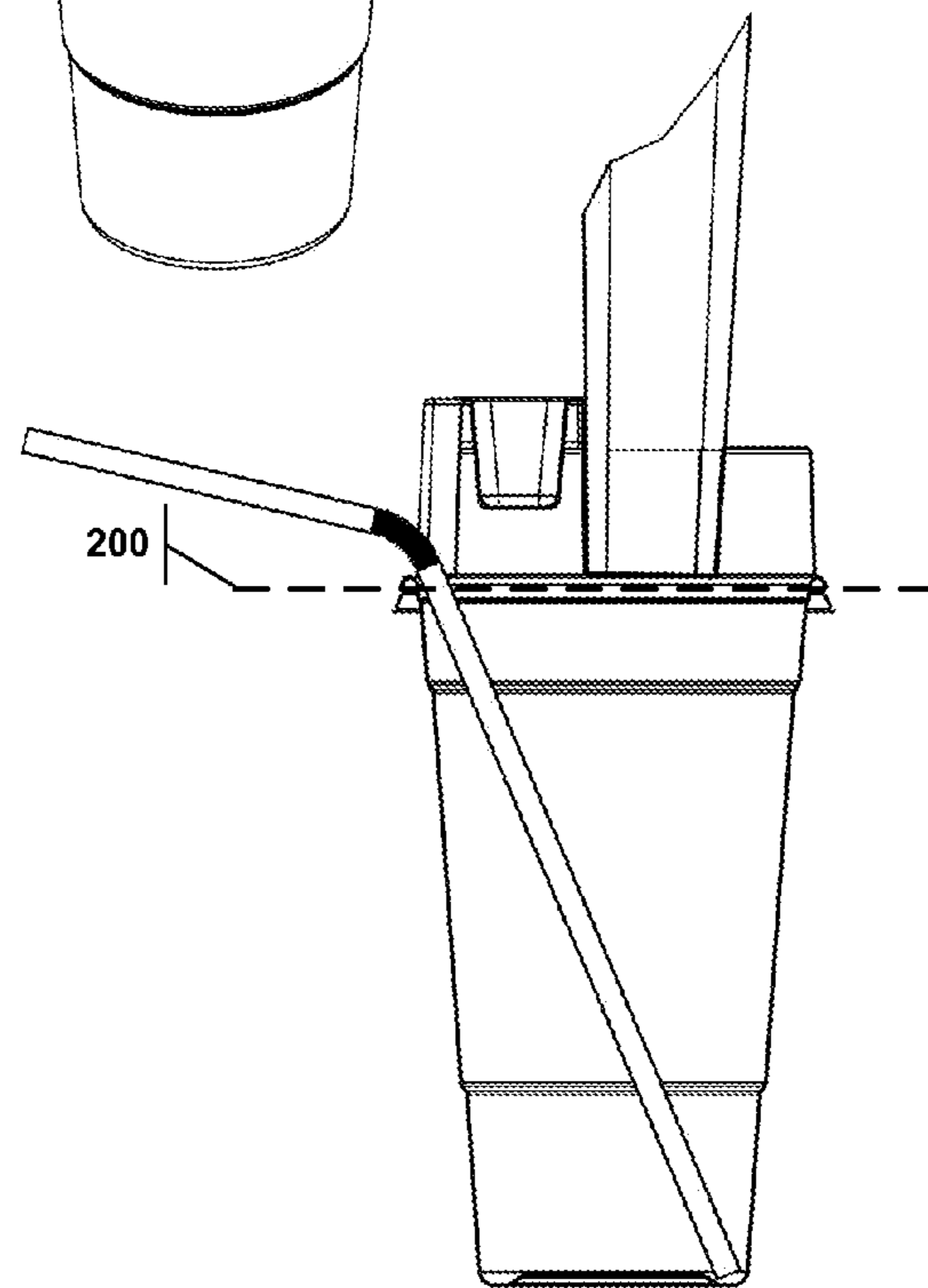


FIGURE 4E

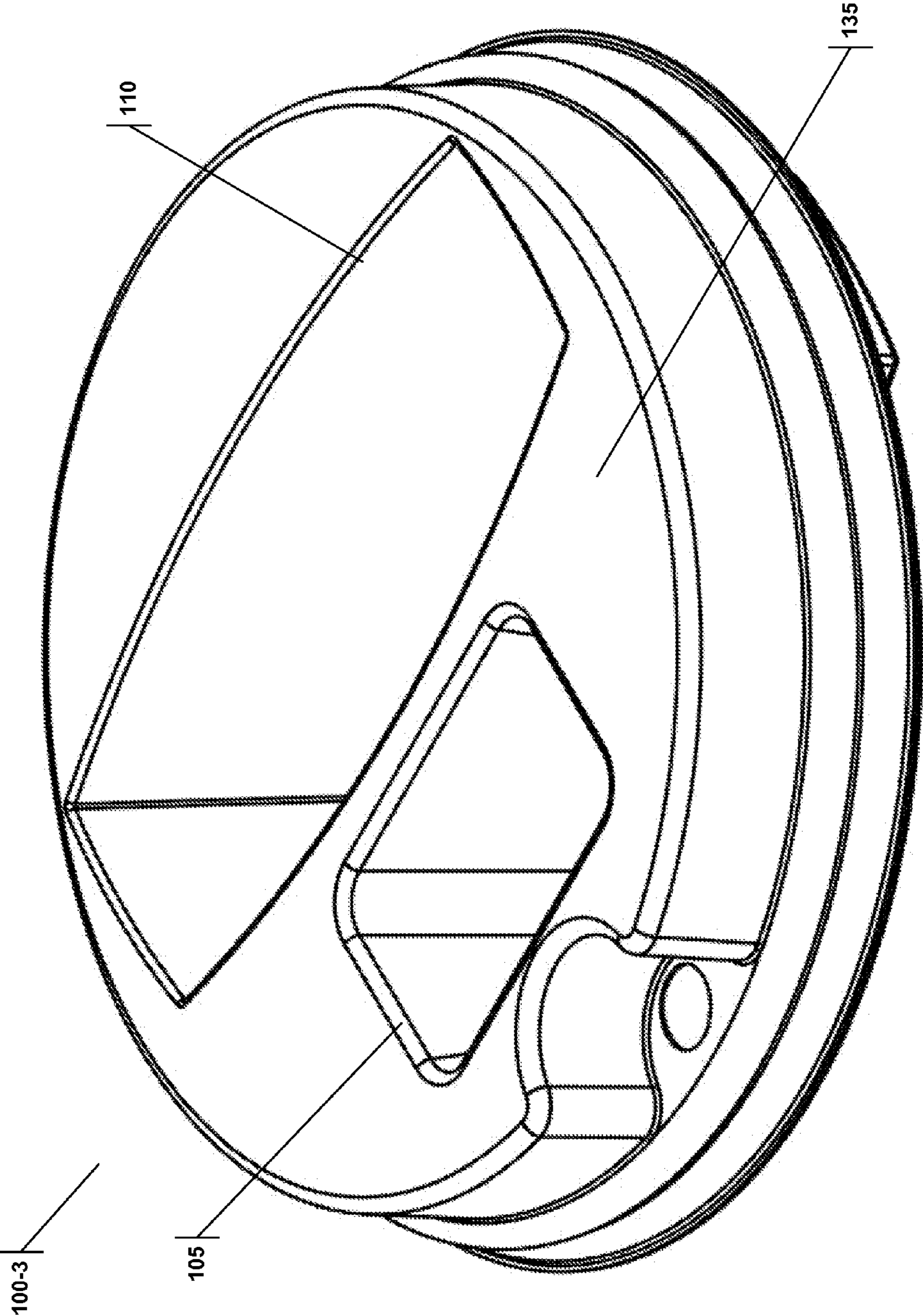


FIGURE 5A

FIGURE 5B

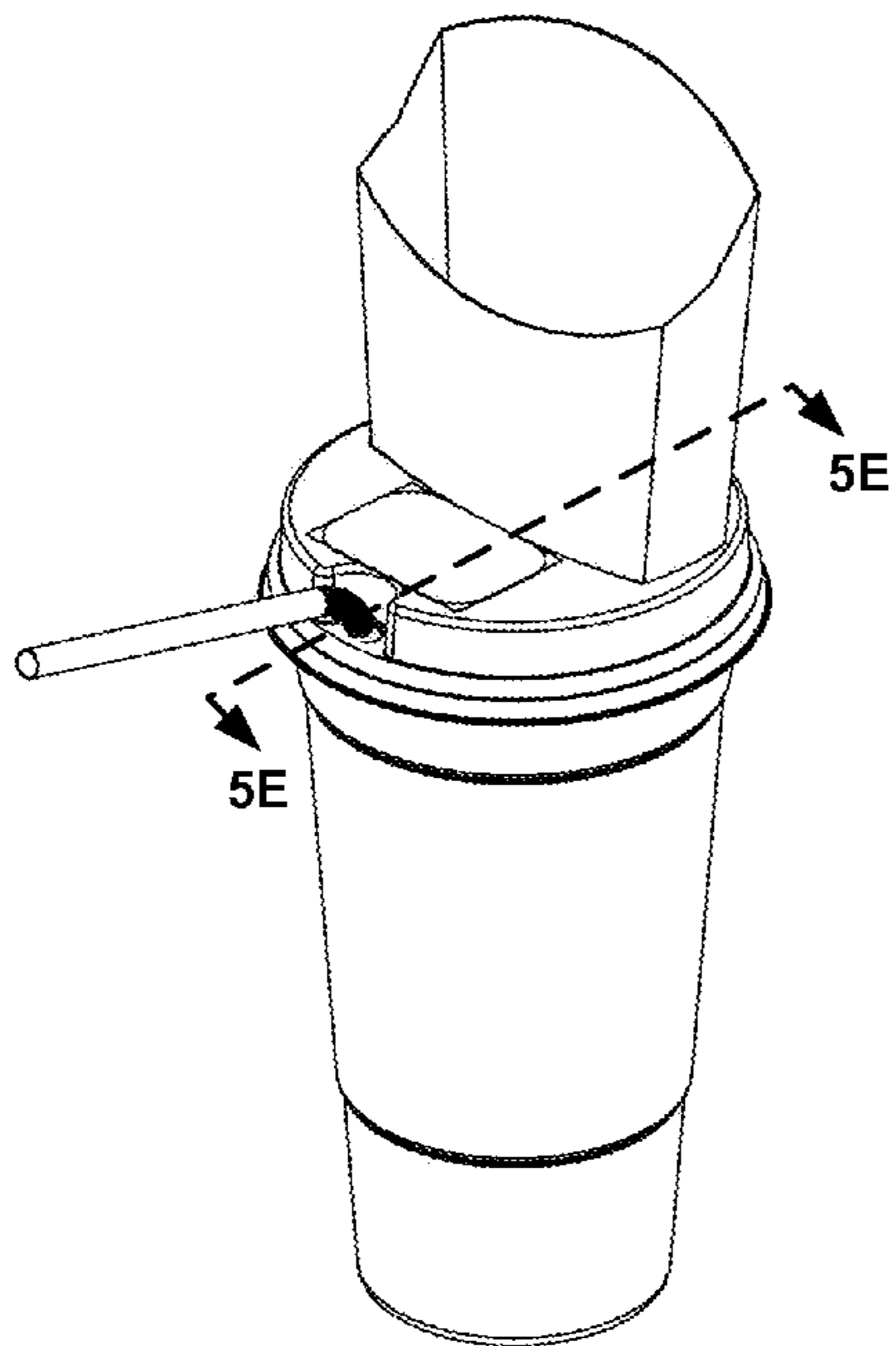


FIGURE 5C

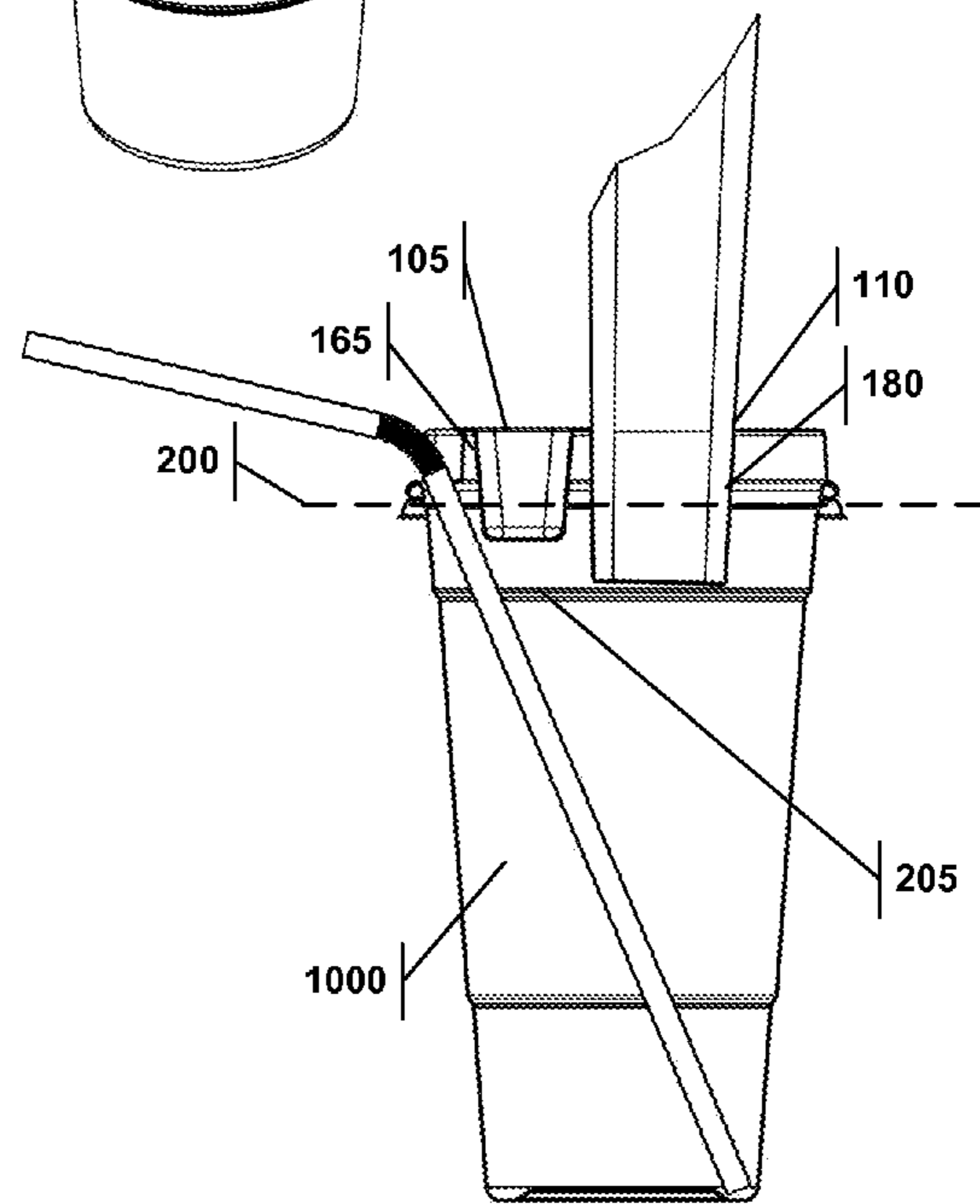
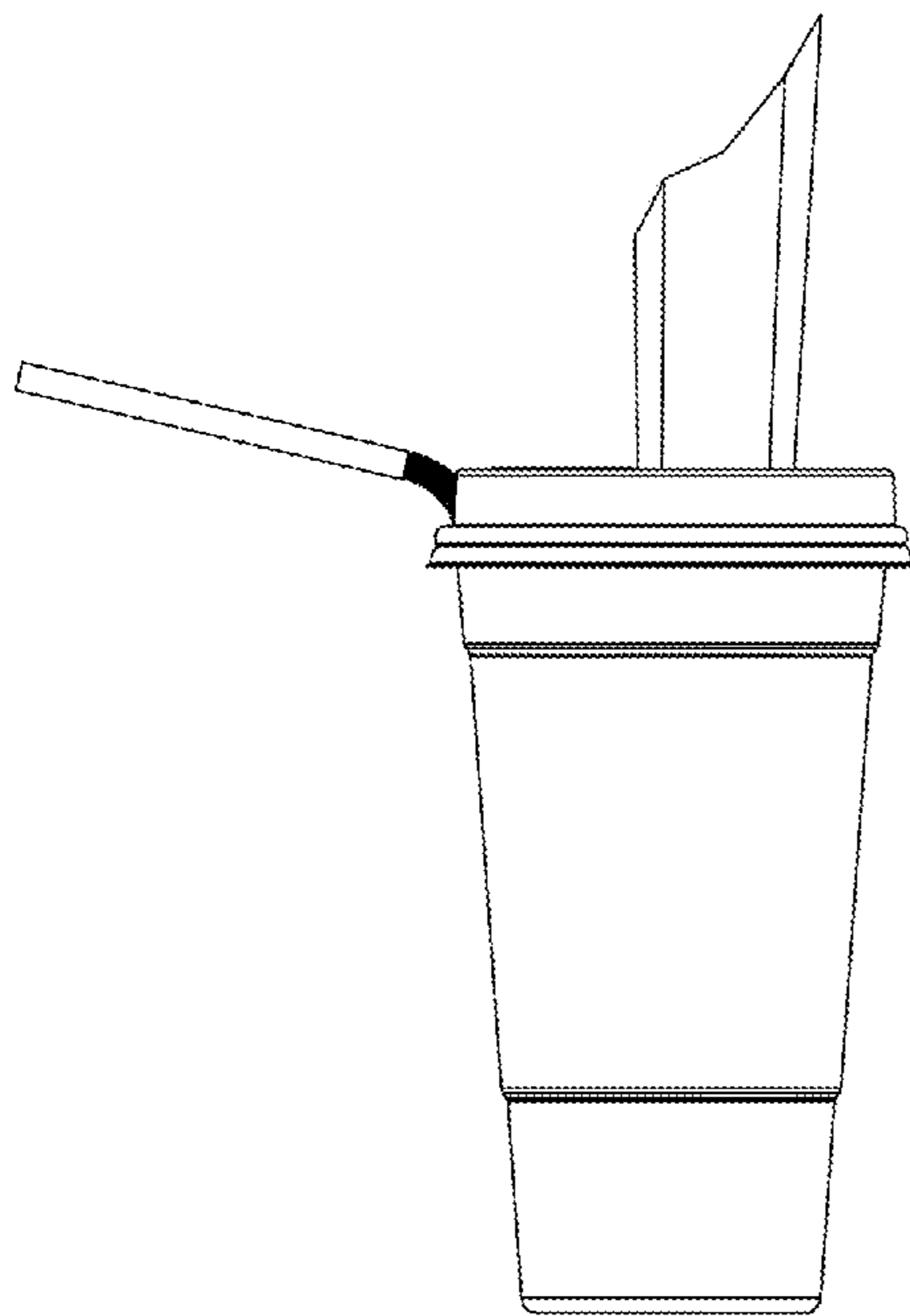
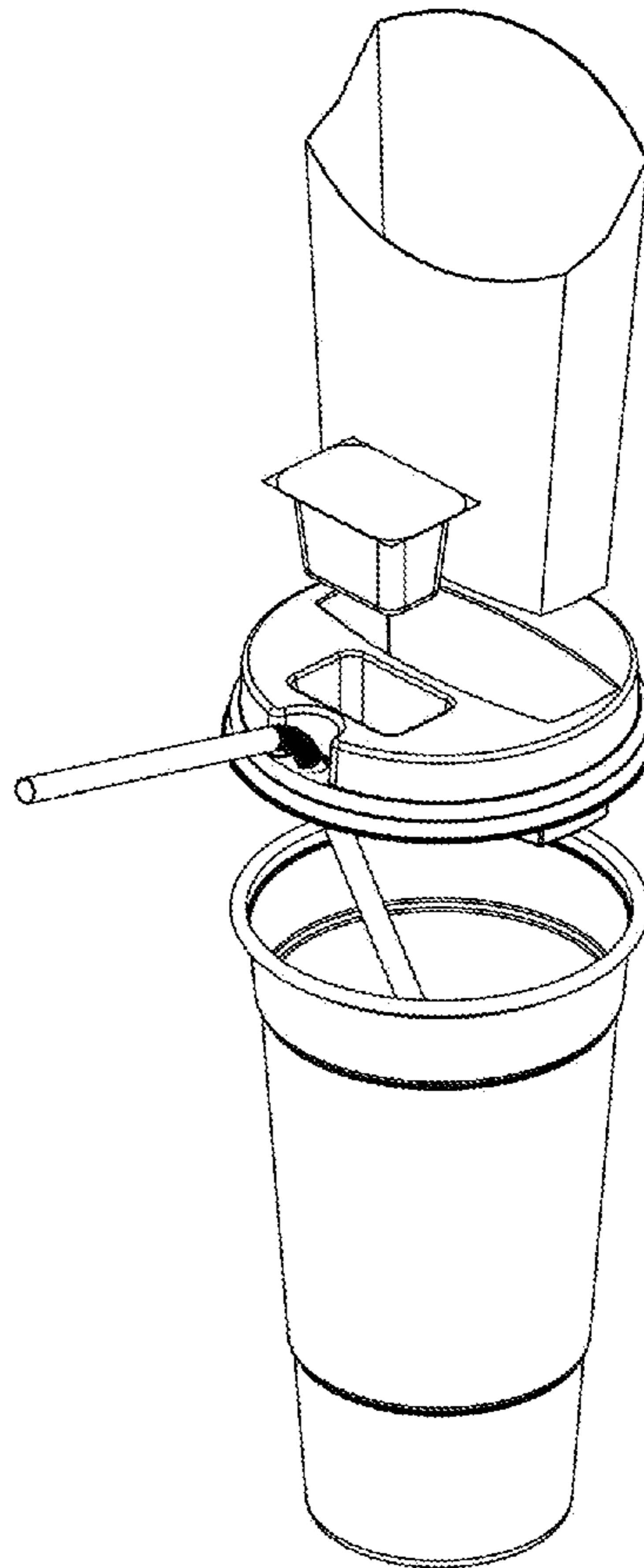


FIGURE 5D

FIGURE 5E

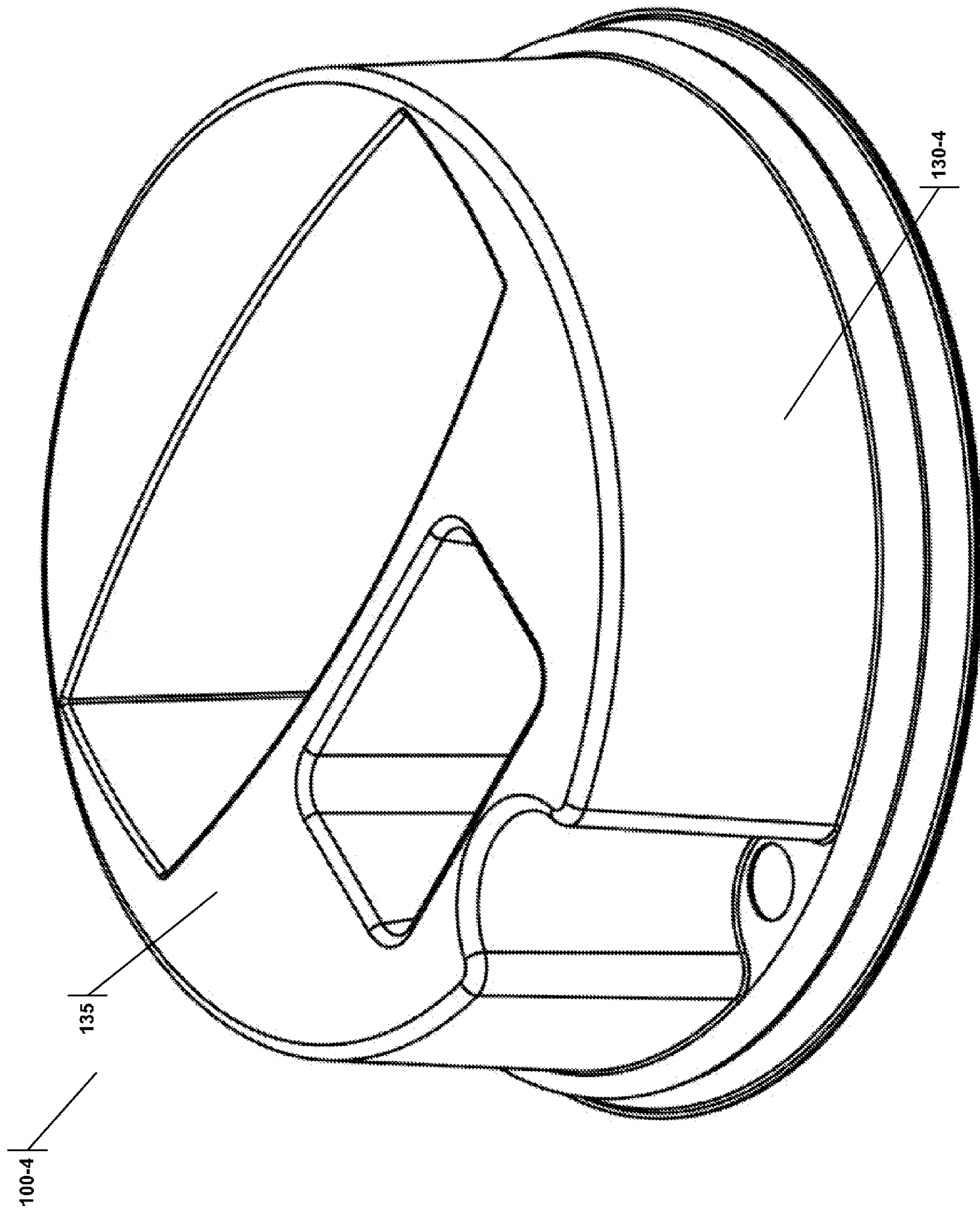


FIGURE 6A

FIGURE 6B

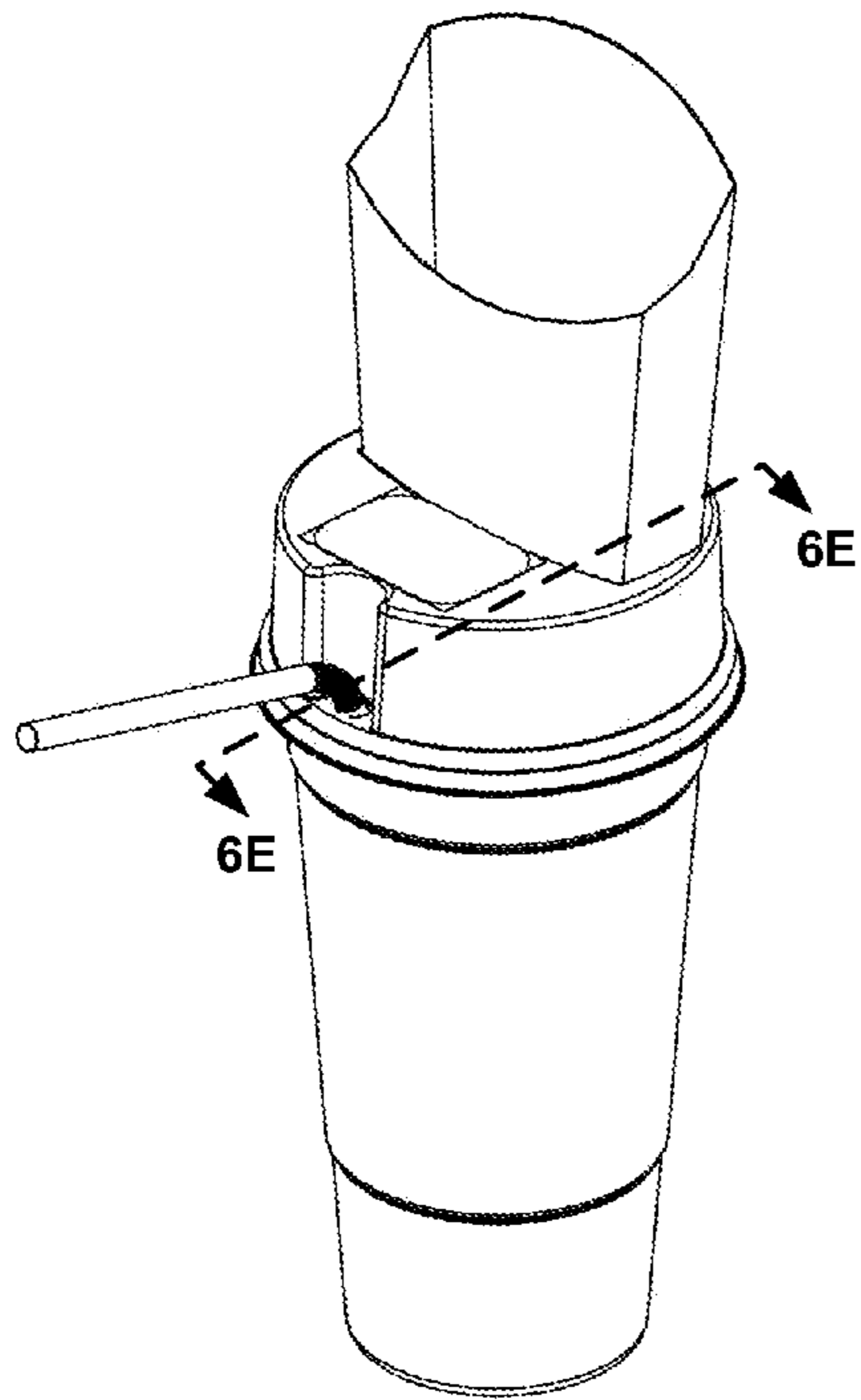


FIGURE 6C

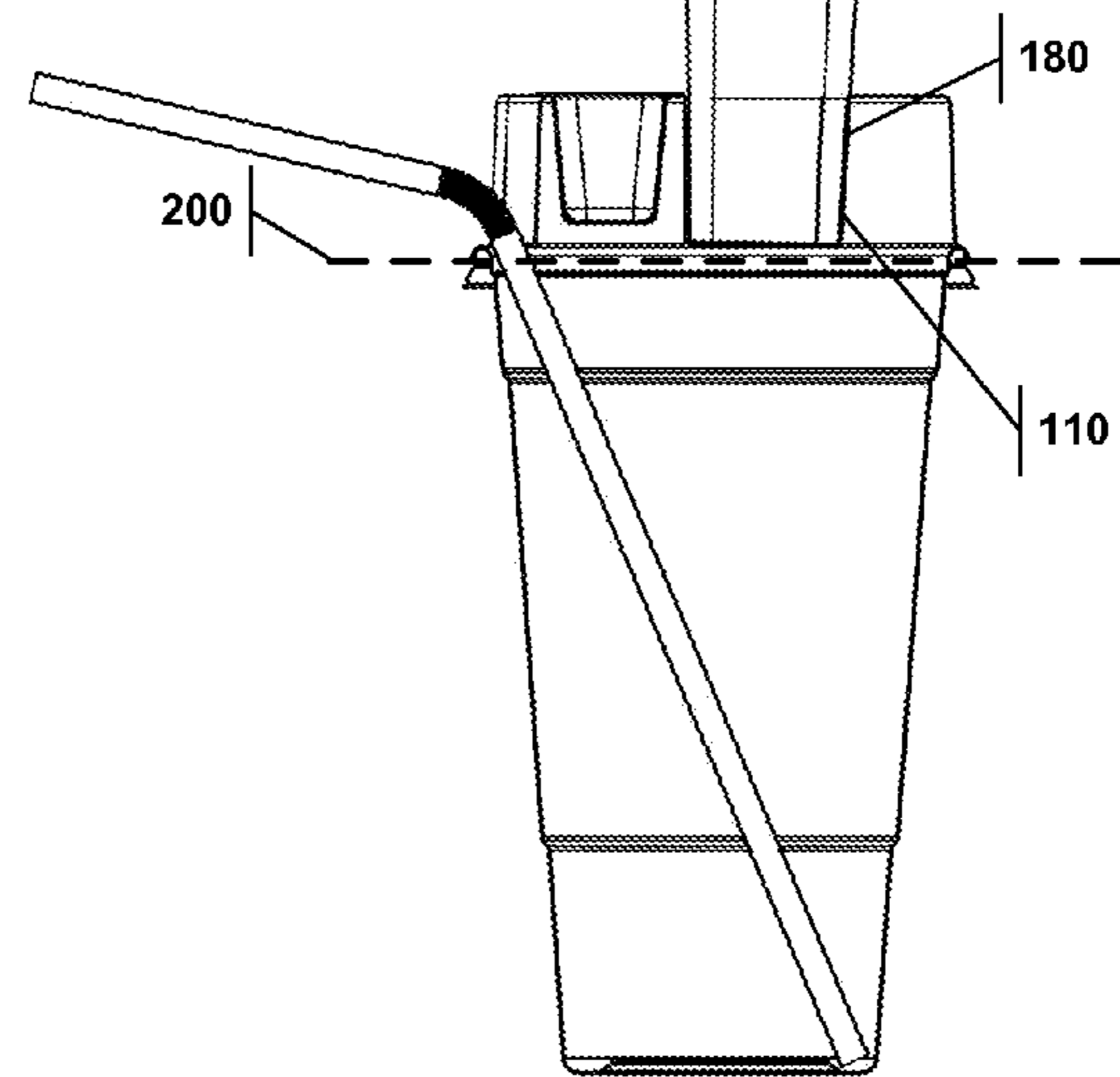
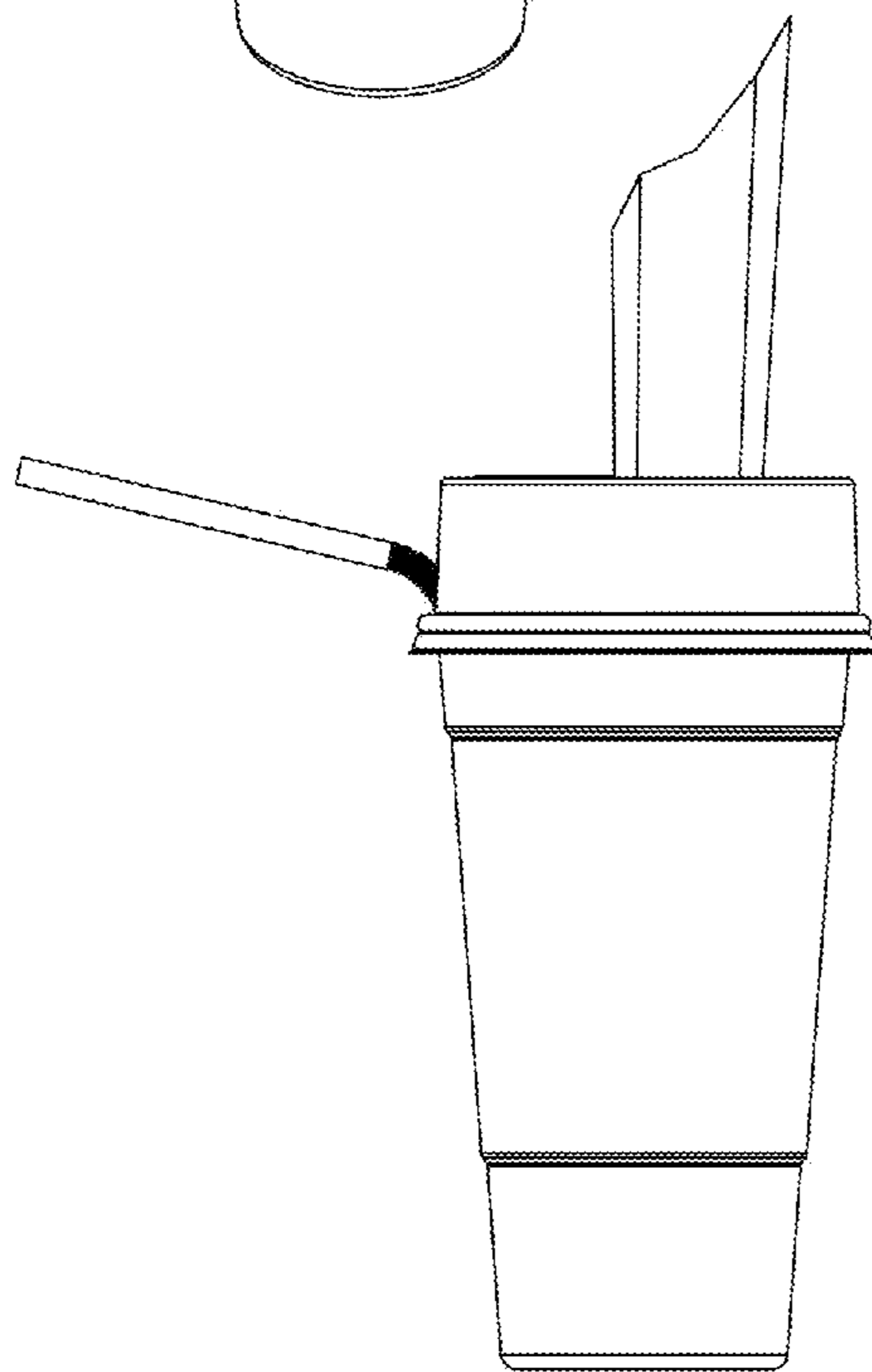
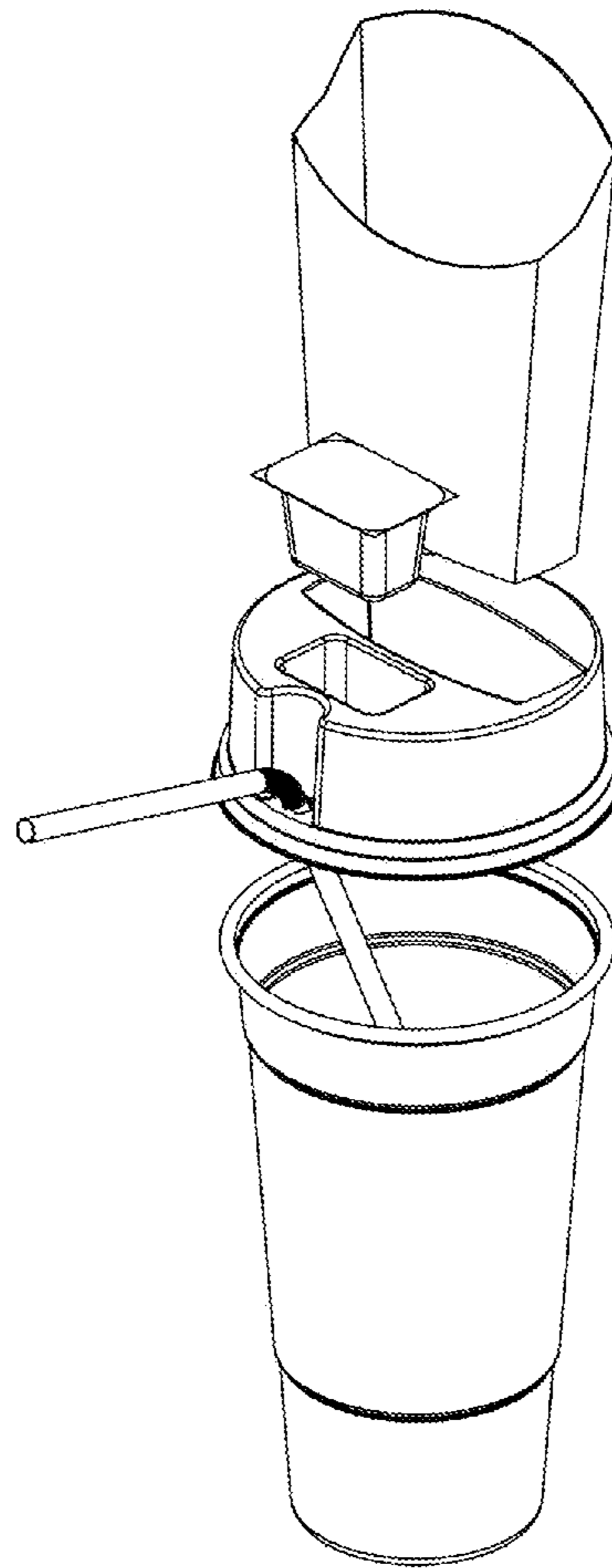


FIGURE 6D

FIGURE 6E

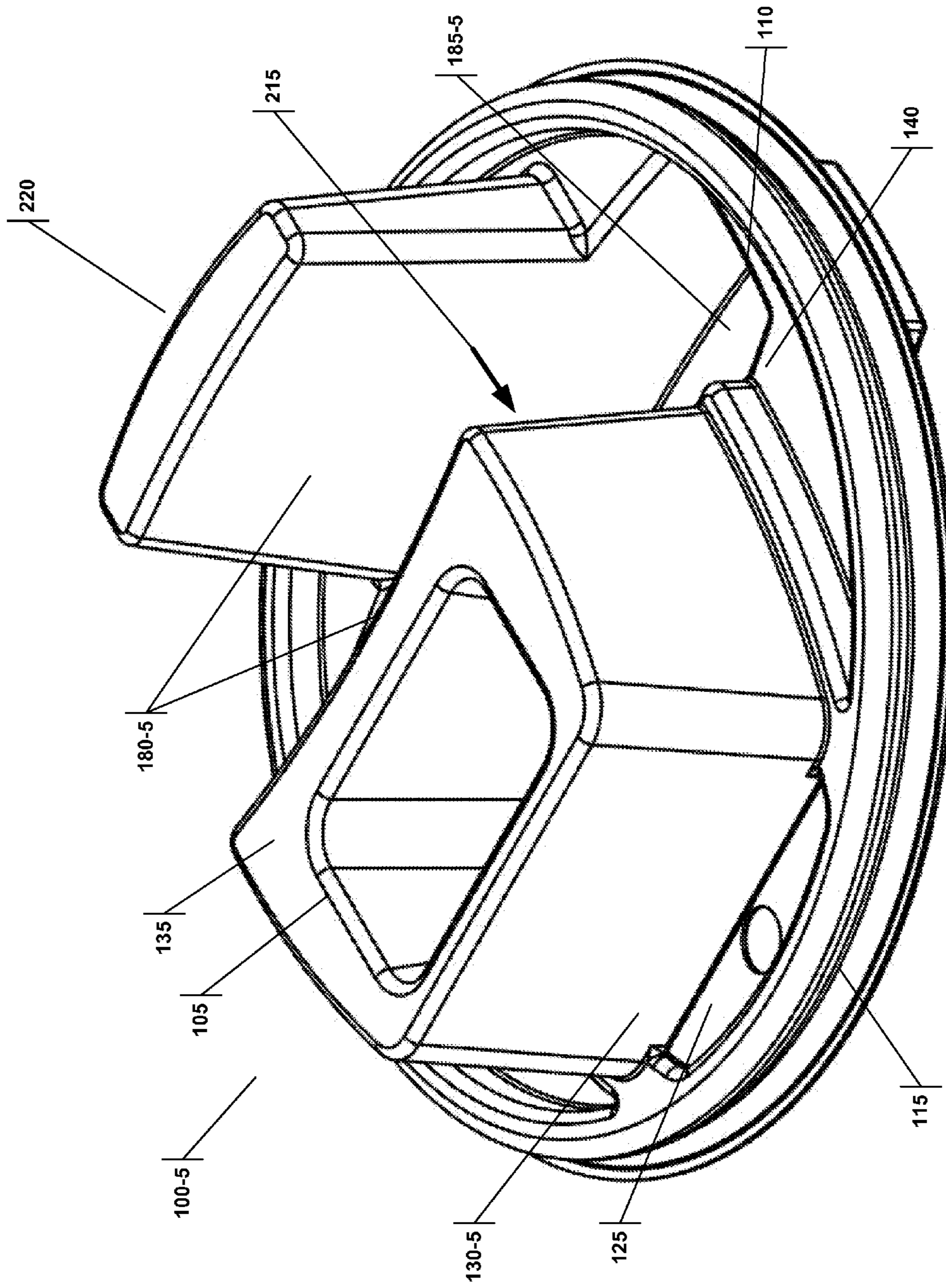


FIGURE 7A

FIGURE 7B

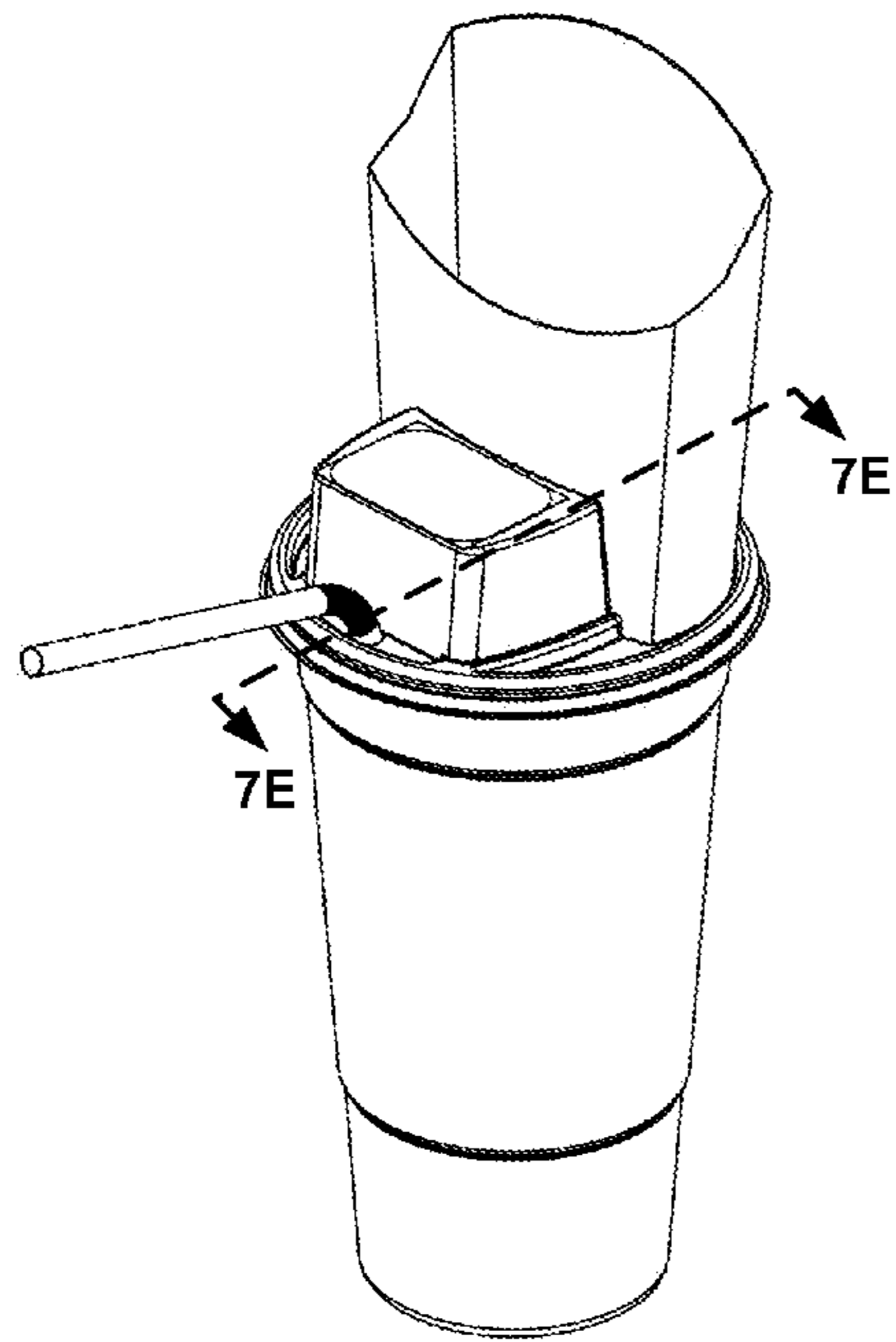


FIGURE 7C

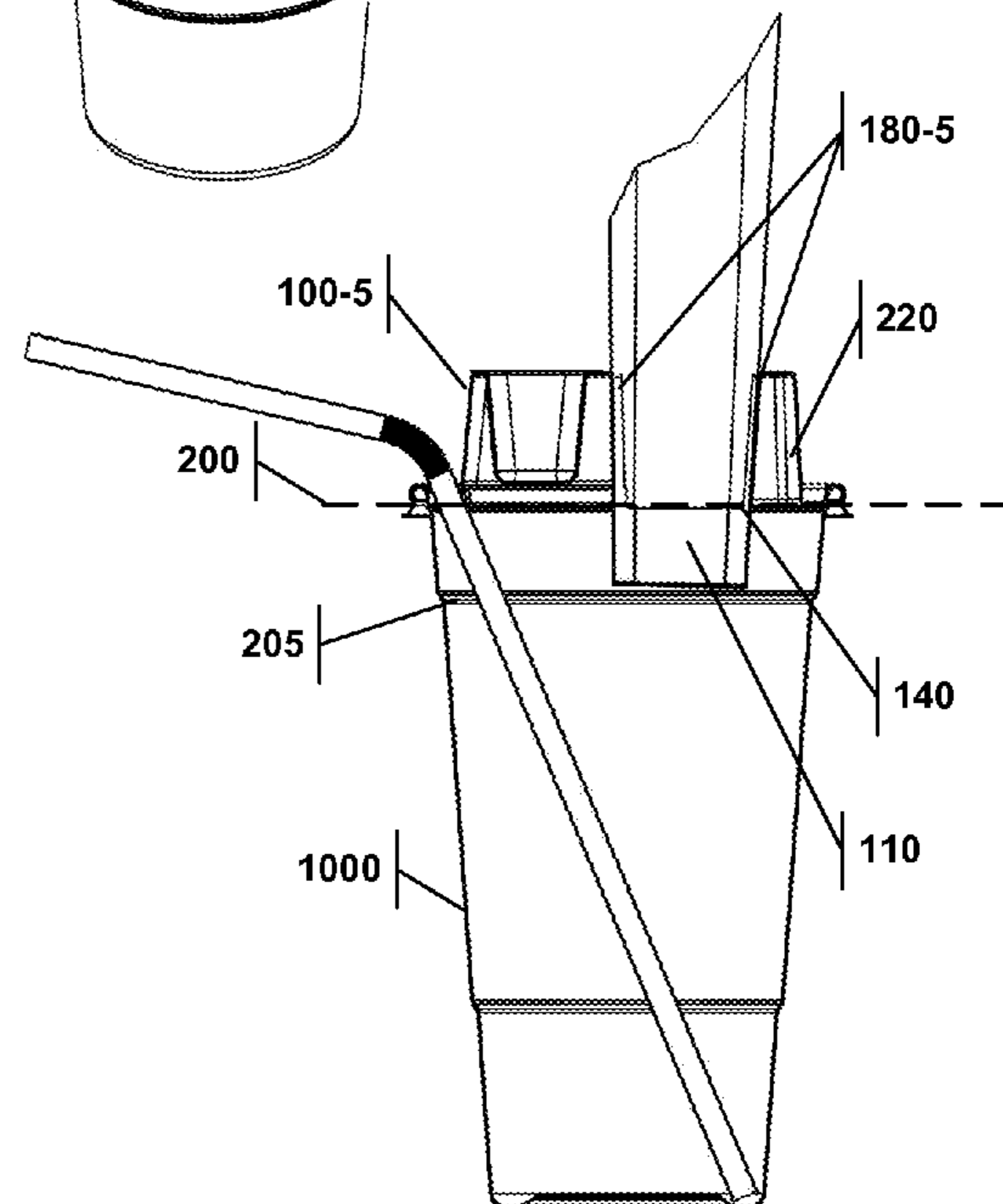
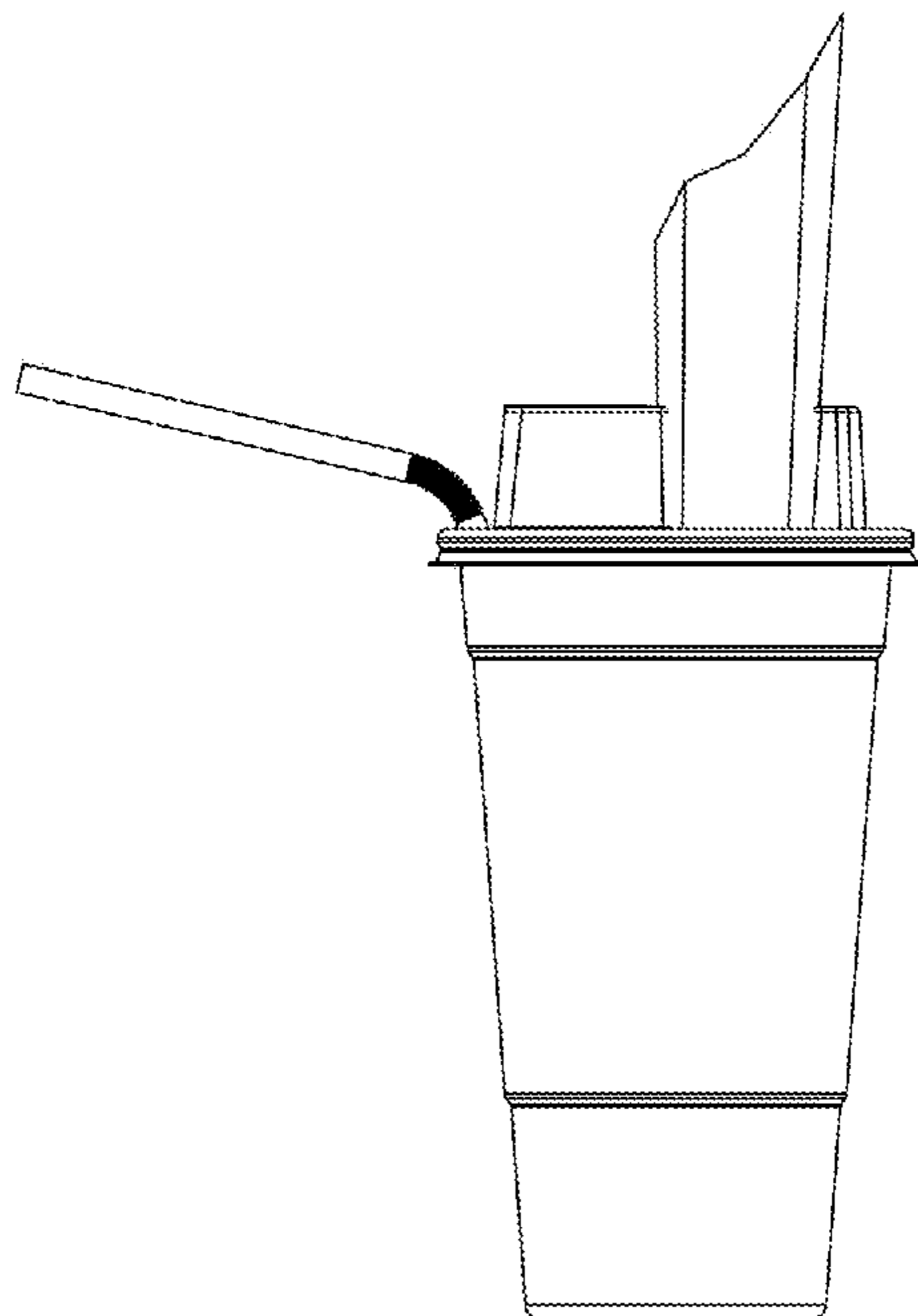
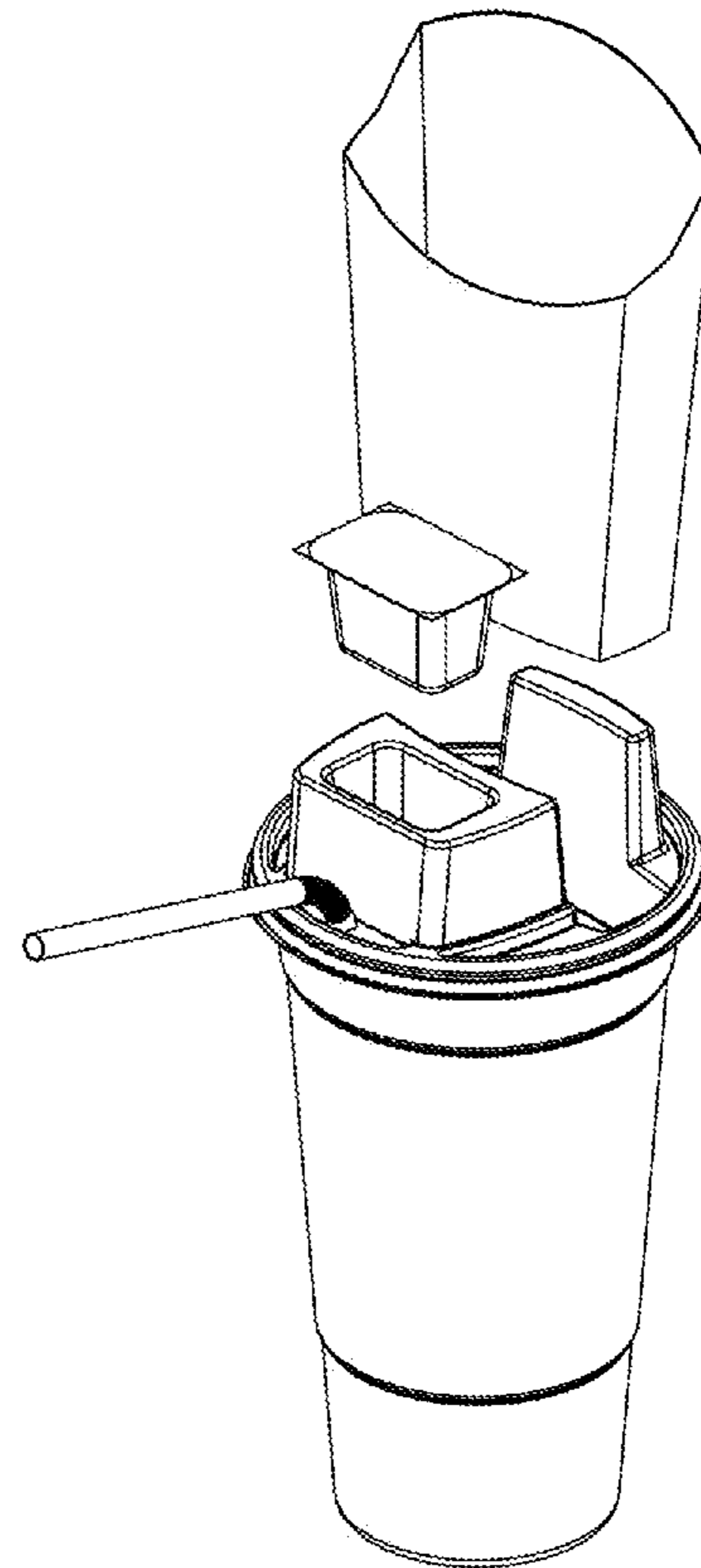


FIGURE 7D

FIGURE 7E

1**CONTAINER LID WITH ONE OR MORE
CAVITIES****1.0 TECHNICAL FIELD**

The present invention relates to lids for disposable containers, and particularly to a new and novel lid with one or more cavities.

2.0 BACKGROUND

The increased popularity of fast food establishments, coupled with the popularity for consumption of food on-the-go has led to the need for more convenient carrying of condiments and food.

Billions of disposable beverage containers are used every year. Often those containers are part of a larger meal, and current technology dictates placing a lid on the beverage container, and packing the food and condiments in a separate and detached containers. This may be satisfactory for a consumer seated at a table. However, when the consumer must eat on-the-go, use of the current technology is problematic. Consider, for example, a consumer that is drinking the beverage and would like to access a French fry and ketchup. The consumer must set aside a beverage, and then use one hand to hold the bag and the other hand to access the ketchup packet, then set aside the bag and use both hands to open the packet, and finally free up one hand to access the fry and dip it into the packet. As shown in this example, current technology does not allow for convenient on-the-go eating.

Some prior art references have attempted to address these problems. For example, U.S. Pat. No. 5,722,558 discloses a container lid with a single reservoir that is configured to proceed downward from the top horizontal plane that is formed by the rim of the beverage container. The condiment reservoir projects downward into the floating ice or cold beverage that is contained within the beverage container such that the condiment within the downward reservoir becomes slightly chilled. The structure disclosed in U.S. Pat. No. 5,722,558 does not extend upwardly away from the plane defined by the rim. This has several shortcomings. First, since the disclosure only addresses a reservoir that extends downwardly into the beverage container, if the reservoir was to be substantially large or deep the liquid capacity of the beverage container would be adversely decreased because of fluid displacement. Second, the low position of the reservoir makes it difficult and messy to access. If, for example, a user were to fill the reservoir with ketchup, dipping into the reservoir would most likely cause the ketchup to spill onto the straw. Third, the low position of the reservoir interferes with the straw location and placement. For example as shown in FIG. 2A, when a straw is inserted it is likely that the bottom of the straw could not access the entire bottom surface of the beverage container. While this may be surmountable when the beverage is thin (like water), when the beverage is thick (like a milkshake) the user must be able to manipulate the straw along the entire bottom surface to extract all of the beverage. And again, as the size and/or depth of the reservoir increases, the more the reservoir will interfere with the straw location and placement.

U.S. Pat. No. 6,209,748 has some of the same shortcomings. In several embodiments, the outer ring that attaches to the beverage container rim has a perforated pour tab that can be lifted such that a user sip the beverage through the pour tab. This pour tab, however, substantially compromises the structural integrity of the lid rendering it structurally unable to support a large food container. In another embodiment, a pour

2

hole is disclosed but that hole is at the same elevation as the reservoirs, again interfering with the straw location and placement.

What is therefore needed is a lid that overcomes these shortcomings, and fosters convenient on-the-go eating.

3.0 SUMMARY

The present invention provides an elegant solution to the needs described above and provides numerous additional benefits and advantages as will be apparent to persons of skill in the art. One aspect provides a container lid with a first cavity, the lid including a continuous outer coupling trough for attachment of the lid to the open top of a container where the trough circumscribes a footprint of the container lid. The lid also includes a straw-hole planar surface with a hole for drinking a liquid in the container. A riser wall may extend away from the straw-hole planar surface and defines a first planar surface above the straw-hole planar surface. The straw-hole surface and the first planar surface are within the footprint. The first planar surface includes a first opening that forms the first cavity, the first cavity further includes first cavity side walls connected to the first planar surface and extending from the first planar surface to a position lower than the first planar surface and a first cavity bottom connected to the first cavity side walls. The first planar surface may also have a second opening that forms a second cavity. The lid may also have a second planar surface that is above the straw-hole plane and below the first plane, and the second planar surface may have a second opening that forms a second cavity. The second planar surface may also be generally in the same plane as the outer coupling trough.

Another aspect provides a container lid with a first and second cavity, the lid includes a continuous outer coupling trough for attachment to the open top of a container where the trough circumscribes a footprint of the container lid. A hole extends through the lid for drinking a liquid in the container. A riser wall extends away from the outer coupling trough and defines a first planar surface above the outer coupling trough. The first planar surface is within the footprint and has a first opening that forms the first cavity. The first cavity further has first cavity side walls connected to the first planar surface and extending from the first planar surface to a position lower than the first planar surface and a first cavity bottom connected to the first cavity side walls. The first planar surface may also have a second opening that forms the second cavity, where the second cavity includes second cavity side walls connected to the first planar surface and extending from the first planar surface to a position lower than the first planar surface and a second cavity bottom connected to the second cavity side walls. The first cavity maybe located closer to the hole than the second cavity, and the first cavity is smaller than the second cavity.

Yet another aspect provides a container lid with a first and second cavity, the lid includes a continuous outer coupling trough for attachment to the open top of a container where the trough circumscribes a footprint of the container lid. A hole extends through the lid for drinking a liquid in the container. A riser wall extends away from the outer coupling trough and defines a first planar and a second planar surface above the outer coupling trough. The first planar surface is within the footprint and has a first opening that forms the first cavity. The first cavity further has first cavity side walls connected to the first planar surface and extending from the first planar surface to a position lower than the first planar surface and a first cavity bottom connected to the first cavity side walls. The second planar surface is within the footprint but below the

first planar surface. The second planar surface has a second opening that forms the second cavity, where the second cavity includes second cavity side walls connected to the second planar surface and extending from the second planar surface to a position lower than the second planar surface and a second cavity bottom connected to the second cavity side walls. The first cavity maybe located closer to the hole than the second cavity, and the first cavity is smaller than the second cavity.

The riser wall may form an inward indent, and the first cavity maybe located closer to the hole than the second cavity. Also, the second cavity side walls maybe constructed to exert compressive force on a food container when the food container is disposed of in the second cavity. The first cavity may be adapted to receive a condiment container and the second cavity to receive a food container.

The foregoing summary is illustrative only and is not meant to be exhaustive. Other aspects, objects, and advantages of this invention will be apparent to those of skill in the art upon reviewing the drawings, the disclosure, and the appended claims.

4.0 BRIEF DESCRIPTION OF THE DRAWINGS

The invention can be better understood with reference to the following figures. The components within the figures are not necessarily to scale, emphasis instead being placed on clearly illustrating example aspects of the invention. In the figures, like reference numerals designate corresponding parts throughout the different views and/or embodiments. It will be understood that certain components and details may not appear in the figures to assist in more clearly describing the invention.

FIG. 1 is an isometric view of a first embodiment of a novel lid with two cavities attached to a beverage container.

FIG. 2A is an isometric view of the first embodiment of the novel lid with two cavities of FIG. 1, wherein the lid is not attached to a beverage container.

FIG. 2B is an isometric view of a second embodiment of a novel lid with two cavities, wherein the lid is not attached to a beverage container.

FIG. 2C is an isometric view of a third embodiment of a novel lid with two cavities, wherein the lid is not attached to a beverage container.

FIG. 2D is an isometric view of a fourth embodiment of a novel lid with two cavities, wherein the lid is not attached to a beverage container.

FIG. 2E is an isometric view of a fifth embodiment of a novel lid with two cavities, wherein the lid is not attached to a beverage container.

FIG. 3A is an isometric view of the first embodiment of the novel lid with two cavities of FIGS. 1 and 2A.

FIG. 3B is an isometric view of the first embodiment of the novel lid with two cavities of FIGS. 1 and 2A, attached to a beverage container.

FIG. 3C illustrates the first embodiment of the novel lid with two cavities of FIGS. 1 and 2A, in an exploded and isometric view with a beverage container.

FIG. 3D illustrates a side view of the first embodiment of the novel lid with two cavities of FIGS. 1 and 2A, attached to a beverage container.

FIG. 3E illustrates a cross-sectional view along line 3E-3E of the first embodiment of the novel lid with two cavities of FIGS. 1 and 2A, attached to a beverage container.

FIG. 4A is an isometric view of the second embodiment of the novel lid with two cavities of FIG. 2B.

FIG. 4B is an isometric view of the second embodiment of the novel lid with two cavities of FIG. 2B, attached to a beverage container.

FIG. 4C illustrates the second embodiment of the novel lid with two cavities of FIG. 2B, in an exploded and isometric view with a beverage container.

FIG. 4D illustrates a side view of the second embodiment of the novel lid with two cavities of FIG. 2B, attached to a beverage container.

FIG. 4E illustrates a cross-sectional view along line 4E-4E of the second embodiment of the novel lid with two cavities of FIG. 2B, attached to a beverage container.

FIG. 5A is an isometric view of the third embodiment of the novel lid with two cavities of FIG. 2C.

FIG. 5B is an isometric view of the third embodiment of the novel lid with two cavities of FIG. 2C, attached to a beverage container.

FIG. 5C illustrates the third embodiment of the novel lid with two cavities of FIG. 2C, in an exploded and isometric view with a beverage container.

FIG. 5D illustrates a side view of the third embodiment of the novel lid with two cavities of FIG. 2C, attached to a beverage container.

FIG. 5E illustrates a cross-sectional view along line 5E-5E of the third embodiment of the novel lid with two cavities of FIG. 2C, attached to a beverage container.

FIG. 6A is an isometric view of the fourth embodiment of the novel lid with two cavities of FIG. 2D.

FIG. 6B is an isometric view of the fourth embodiment of the novel lid with two cavities of FIG. 2D, attached to a beverage container.

FIG. 6C illustrates the fourth embodiment of the novel lid with two cavities of FIG. 2D, in an exploded and isometric view with a beverage container.

FIG. 6D illustrates a side view of the fourth embodiment of the novel lid with two cavities of FIG. 2D, attached to a beverage container.

FIG. 6E illustrates a cross-sectional view along line 6E-6E of the fourth embodiment of the novel lid with two cavities of FIG. 2D, attached to a beverage container.

FIG. 7A is an isometric view of the fifth embodiment of the novel lid with two cavities of FIG. 2E.

FIG. 7B is an isometric view of the fifth embodiment of the novel lid with two cavities of FIG. 2E, attached to a beverage container.

FIG. 7C illustrates the fifth embodiment of the novel lid with two cavities of FIG. 2E, in an exploded and isometric view with a beverage container.

FIG. 7D illustrates a side view of the fifth embodiment of the novel lid with two cavities of FIG. 2E, attached to a beverage container.

FIG. 7E illustrates a cross-sectional view along line 7E-7E of the fifth embodiment of the novel lid with two cavities of FIG. 2E, attached to a beverage container.

5.0 DETAILED DESCRIPTION OF EXAMPLE EMBODIMENTS

Following is a non-limiting written description of example embodiments illustrating various aspects of the invention. These examples are provided to enable a person of ordinary skill in the art to practice the full scope of the invention without having to engage in an undue amount of experimentation. As will be apparent to persons skilled in the art, further modifications and adaptations can be made without departing from the spirit and scope of the invention, which is limited only by the claims.

In the following description, numerous specific details are set forth in order to provide a thorough understanding of the present invention. Particular example embodiments of the present invention may be implemented without some or all of these features or specific details. In other instances, components well known to persons of skill in the art have not been described in detail in order not to obscure unnecessarily the present invention.

Referring to FIG. 1, a lid 100 is shown connected to a beverage container 1000. The lid 100 contains a first cavity 105 intended to hold a condiment container 1010 and a second cavity 110 intended to hold a food container 1020. Optionally, the first cavity 105 may hold the condiment directly without the use of a condiment container. Similarly, the second cavity 110 may hold the food directly without the use of a food container.

The lid 100 may be removably attached to the beverage container 1000 by an outer coupling trough 115 that mates with and locks onto the lip of the beverage container 1000. The outer coupling trough 115 continuously circumscribes the lid 100 and defines a footprint of the lid 100. What is meant by a footprint is essentially the area the lid 100 would project onto a horizontal surface when the lid 100 is placed on a horizontal surface. The continuous outer coupling trough 115 adds structural integrity to the lid 100 such that the lid 100 resists undue deformation that would render it difficult to properly install onto the lip of the beverage container 1000. Additionally, the outer coupling trough 115 provides a liquid-proof seal so as to prevent spillage.

The lid 100 also has a straw hole 120 that allows a straw 1030 to access the liquid held by the beverage container 1000. The straw hole 120 is located on the straw-hole planar surface 125 that may be substantially parallel to the plane defined by the outer coupling trough 115 (i.e., would be substantially horizontal). The straw-hole planar surface 125 may connect to the outer coupling trough 115.

Riser wall 130 may extend away from the straw-hole planar surface 125 and also away from the outer coupling trough 115. It would be apparent to one of skill in the art that the riser wall 130 may be a single uninterrupted wall or a series of walls. The top of the riser wall 130 defines a first planar surface 135 that is above the straw-hole planar surface 125. Throughout this disclosure the terms “above” and “below” will be used, and are intended to mean the following: “above” is a location that is vertically higher when the lid 100 is attached to a beverage container 1000 resting on a horizontal surface; and “below” is a location that is vertically lower when the lid 100 is attached to a beverage container 1000 resting on a horizontal surface. The first cavity 105 is formed into the first planar surface 135.

The top of the riser wall 130 may also define a second planar surface 140 that is above the straw-hole planar surface 125, but below the first planar surface 135. The second cavity 110 is formed into the second planar surface 140.

The riser wall 130 may also have an inward indent 145, shown in an arched shape. It would be apparent to those of skill in the art that the inward indent 145 may be of any suitable shape. In the embodiment shown in FIG. 1, the inward indent 145 allows room for the straw-hole planar surface 125, while allowing the riser wall 130 to continuously follow the outer edge of the lid 100. And because the riser wall 130 follows the outer edge, it provides more structural stability to the lid 100. This stability is necessary given the torsional forces imparted onto the lid by the food container's 1020 high center of gravity.

Not only does the placement of the inward indent 130 provide room for the straw-hole planar surface 125 and the

straw 1030 when inserted, but it also provides the user of the lid 100 an easy way to remove a condiment container 1010. Specifically, condiment containers 1010 often have an outer flange for structural reinforcement, and that flange may hang over the inward indent 130 such that the user can manipulate their finger in the direction of arrow 150, thus lifting the condiment container 1010 out of the first cavity 105.

The relative elevations and locations of the straw-hole planar surface 125, the first planar surface 135 and the second planar surface 140 address several issues. Because the height of the first planar surface 135 is higher than the second planar surface 140, the opening of the condiment container 1010 placed in the first cavity 105 would be closer to the opening of the food container 1020, allowing a user to more easily access the condiment without a mess. Also elevating the first cavity 105 prevents the bottom of the first cavity 170 from interfering with the straw (this is shown in FIG. 3E); thus allowing a user unfettered access (via the straw) to the entire bottom of the beverage container 1000. The lower elevation of the straw-hole planar surface 125 lowers the location of the straw such that the condiment is less likely to be spilt onto the straw, causing a mess for the user. Also, the elevated first planar surface 135 provides a longer vertical side wall 155 for the second cavity 110, which further stabilized the food container 1020 which has a high center of gravity. Finally, the first cavity 105 is located closer to the straw hole 120, than the second cavity 110. A user can thus hold the beverage container 1000 with one hand and take a drink from the straw 1030, then with his other hand grab a French fry from the food container 1020, dip it in the ketchup from the condiment container 1010 and continuing in the same motion bringing the dipped French fry to their mouth. It should be apparent that the container lids described herein may be used for a variety of food items, such as by non-limiting example, chicken strips, chick nuggets, potato wedges, and fish sticks.

FIG. 2A illustrates the lid 100 of the embodiment just describe with reference to FIG. 1, while FIGS. 2B through 2E illustrate other embodiments. Each of these embodiments will be discussed in detail below as follows:

FIGS. 3A through 3E detail the lid 100 shown in FIG. 2A
 FIGS. 4A through 4E detail the lid 100-2 shown in FIG. 2B
 FIGS. 5A through 5E detail the lid 100-3 shown in FIG. 2C
 FIGS. 6A through 6E detail the lid 100-4 shown in FIG. 2D
 FIGS. 7A through 7E detail the lid 100-5 shown in FIG. 2E

Turning now to FIGS. 3A through 3E, a lid 100 is shown which is the same embodiment just described with reference to FIG. 1. FIG. 3A shows just the lid 100 without the straw, the food container, the condiment container, or the beverage container. The lid 100 may be removably attached to a beverage container by an outer coupling trough 115 that mates with and locks onto the lip of the beverage container. The lid 100 also has a straw hole 120 located on the straw-hole planar surface 125 that may be substantially parallel to the plane defined by the outer coupling trough 115. The straw-hole planar surface may connect to the outer coupling trough 115.

The first cavity 105 has a first opening 160 in the first planar surface 125. Riser wall 130 which extends away from the straw-hole planar surface 125 supports the first planar surface 125. Extending downwardly away from the first planar surface 125 are first cavity side walls 165 and a first cavity bottom 170 (FIG. 3E); the side walls 165 and the bottom 170 form the first cavity 105.

The second cavity 110 has a second opening 175 in the second planar surface 140. Riser wall 130 supports the second planar surface 140. Extending downwardly away from the second planar surface 140 are second cavity side walls 180 and a second cavity bottom 185 (FIG. 3E); the side walls 180

and the bottom **185** form the second cavity **110**. The riser wall has an arch-shaped inward indent **145**.

The first cavity side walls **165** may be constructed to exert compressive force on the condiment container when the condiment container is placed in the first cavity **105**. This may be done, for example, by making first cavity side walls **165** taper to a width that is narrower than the condiment container. Because the first cavity side walls **165** are constructed of a semi-compliant material, the first cavity side walls **165** would slightly flex when the condiment container is inserted and that flexing would cause the first cavity side walls **165** to exert compressive force on the condiment container. The second cavity side walls **180** may be constructed in the same fashion. This compressive force stabilizes the condiment container and food container, thus preventing spilling.

The edge of the first cavity **105** may be beveled **190**, to allow for the easier insertion of the condiment container. Likewise the edge of the second cavity **110** may also be beveled **195**, to allow for the easier insertion of the food container.

FIG. 3B illustrates the lid **100** attached to the beverage container **1000**, with a straw **1030**, condiment container **1010** and food container **1020** inserted into the lid **100**. FIG. 3C shows an exploded view of the lid **100**, with the straw **1030** inserted, but the lid **100** is not attached to the beverage container **1000**, and the condiment container **1010** and food container **1020** are not inserted. FIG. 3D is a side view.

FIG. 3E is a cut away cross section take along the line 3E-3E of the FIG. 3B. This view illustrates how the first cavity side walls **165** extend downwardly away from the first planar surface **135**, with a first cavity bottom **170** forming the bottom of the first cavity **105**. Similarly, the second cavity side walls **180** extend downwardly away from the second planar surface **140**, with a second cavity bottom **185** forming the bottom of the second cavity **110**. This view also shows how the elevation of the first cavity **105** and the first cavity bottom **170**, provide a clear path through which a user can insert the straw **1030** and access the entire bottom surface of the beverage container. Further, the lower elevation of the second cavity **110** lowers the center-of gravity of the relatively tall food container **1020**, adding stability.

FIG. 3E also illustrates that the second cavity side walls **180** extend downwardly past the outer coupling trough **115**. Stated another way, the outer coupling trough **115** defines a plane **200** and the second cavity sidewalls **180** extend downwardly to an elevation lower than the plane **200**.

It should be noted that because the second cavity side walls **180** extend downwardly past the outer coupling trough **115**, the second cavity **110** displaces some of the volume of the beverage container **1000**. If the beverage container **1000** is filled to the brim, then attaching the lid **100** to the beverage container **1000** would cause the liquid to spill. To prevent this, it may be advantageous to include a fill line indicator **205** such that when the liquid is filled below the fill line indicator **205** the lid **100** will not displace the liquid and will not cause a spill. This may be a line printed on the beverage container **1000** or a structure, such as a ring or a step.

To prevent the transfer of heat between the beverage and the food in the food compartment, the underside of the lid may include an insulation layer **210**, or alternatively, the insulation layer may float on the top of the beverage contained in the beverage container **1000**.

Turning now to FIGS. 4A through 4E, a second embodiment is shown. This lid **100-2** is substantially similar to the first embodiment (i.e., lid **100**) described with reference to FIGS. 1, and 3A through 3E. The difference is that the riser wall **130-2** is taller, thus elevating the first planar surface **135**

and the second planar surface **140**. This is shown in more detail in FIG. 4E, which is a cut away cross-section take along the line 4E-4E of the FIG. 4B. The second cavity side walls do not extend downwardly past the plane **200** defined by the outer coupling trough. Because the second cavity side walls do not extend past the plane **200**, the second cavity will not displace the volume of the beverage container **1000**, and no fill line indicator would be needed.

FIGS. 5A through 5E illustrate a third embodiment. This lid **100-3** does not have a second planar surface as did the embodiments (i.e., lid **100** and lid **100-2**) described with reference to FIGS. 1, 3A through 3E, and 4A through 4E. Rather, both the first cavity **105** and the second cavity **110** are formed into the first planar surface **135**, and the first planar surface is at an elevation that is lower than in previous embodiments. This is shown in more detail in FIG. 5E, which is a cut away cross-section take along the line 5E-5E of the FIG. 5B. Both the first cavity side walls **165** and the second cavity side walls **180** extend downwardly past the plane **200** defined by the outer coupling trough. Thus both the first cavity **105** and the second cavity **110** displace some of the volume of the beverage container **1000**. A fill line indicator **205** on the beverage container **1000** would be preferable when using the lid **100-3**.

FIGS. 6A through 6E detail a fourth embodiment. This lid **100-4** is substantially similar to the third embodiment (i.e., lid **100-3**) described with reference to FIGS. 5A through 5E. The difference is that the riser wall **130-4** is taller, thus elevating the first planar surface **135**. This is shown in more detail in FIG. 6E, which is a cut away cross-section take along the line 6E-6E of the FIG. 6B. The second cavity side walls **180** do not extend downwardly past the plane **200** defined by the outer coupling trough. Because the second cavity side walls do not extend past the plane **200**, the second cavity **110** will not displace the volume of the beverage container **1000**, and no fill line indicator would be needed.

FIGS. 7A through 7E detail the fifth embodiment. The lid **100-5** includes a first cavity **105**, a second cavity **110**, a straw-hole planar surface **125** and an outer coupling trough **115**. Riser wall **130-5** extends from the straw-hole planar surface **125** and defines a first planar surface **135**, into which the first cavity **105** is disposed. The outer coupling trough **115** defines a plane **200** (FIG. 7E), and a second planar surface **140** is generally within the plane **200**. The second planar surface **140** is connected to the outer coupling trough **115** on its outer edge. It is within this second planar surface **140** that the second cavity **110** is disposed.

The riser wall **130-5** forms part of the second cavity side walls **180-5** (shown at position **215**), which adds stability to the food container because the second cavity bottom **185-5** is not as deep into the second cavity **110**. Without the riser wall **130-5**, the food container would rock and potentially dislodge from the second cavity **110**.

To further stabilize the food container, the lid **100-5** may include a stability structure **220** that allows a portion of the second cavity side walls **180-5** to extend above the second planar surface **140**. FIG. 7E illustrates how a portion of the second cavity side walls **180-5** extend above the second planar surface **140**.

It should also be noted that a portion of the second cavity side walls **180-5** also extend downwardly past the plane **200** defined by the outer coupling trough; thus the second cavity **110** displaces some of the volume of the beverage container **1000**. To prevent spillage, a fill line indicator **205** on the beverage container **1000** would be preferable when using the lid **100-5**.

The embodiments described herein can be constructed using a variety of methods, including by non-limiting example thermoformed (thin gauge) and thin wall injection molding. The types of material would be apparent to one of skill in the art and may include by non-limiting example PP (polypropylene), PET (polyethylene terephthalate), CPET, RPET Polyethylene (HDPE/LDPE), styrene, HIPS, HMWPE, PP/PE blends, custom blends of thermoplastics (which may or may not include post-consumer or post-industrial content) and other proprietary blends of thermoplastics.

The invention has been described in connection with specific embodiments that illustrate examples of the invention but do not limit its scope. Various example systems have been shown and described having various aspects and elements. Unless indicated otherwise, any feature, aspect or element of any of these systems may be removed from, added to, combined with or modified by any other feature, aspect or element of any of the systems. As will be apparent to persons skilled in the art, modifications and adaptations to the above-described systems and methods can be made without departing from the spirit and scope of the invention, which is defined only by the following claims. Moreover, the applicant expressly does not intend that the following claims “and the embodiments in the specification to be strictly coextensive.” *Phillips v. AHW Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc).

The invention claimed is:

1. A container lid with a first cavity and a second cavity, comprising:

an outer coupling trough for attachment to the open top of a container, the trough circumscribing a footprint of the container lid;

a straw-hole planar surface within the footprint, the straw-hole planar surface adjacent the outer coupling trough and comprising a straw hole for drinking a liquid from the container;

a riser wall extending upward from the straw-hole planar surface, the riser wall defining a first planar surface above the straw-hole planar surface, the first planar surface within the footprint; and

the first cavity formed in the first planar surface, the first cavity comprising first cavity side walls extending downward from the first planar surface by a first distance to a first cavity bottom connected to the first cavity side walls;

the second cavity formed in a second planar surface that is within the footprint and parallel to the first planar surface, the second cavity comprising second cavity side walls adapted to closely surround the perimeter of a lower portion of a food container having a high center of gravity and a width at least substantially as wide as the width of the footprint, the second cavity sidewalls

extending downward from the second planar surface by a second distance a second cavity bottom;

wherein the second cavity is adapted to stabilize and support in use said food container, when the container lid is attached to the open top of a container and the perimeter of the lower portion of said food container is closely surrounded by the second cavity side walls while a portion of said food container extends above the second planar surface;

wherein the first cavity sidewalls and the second cavity sidewalls are constructed to prevent the spilling of the contents in the first cavity into the second cavity.

2. The lid of claim **1**, wherein the riser wall forms an inward indent adapted to provide clearance for a straw to be placed through the straw hole.

3. The lid of claim **1**, wherein the riser wall also extends upward from the outer coupling trough.

4. The lid of claim **1**, wherein the outer coupling trough defines a plane and the first cavity side walls extend through the plane.

5. The lid of claim **1**, wherein the second planar surface is located vertically between the first planar surface and the straw-hole planar surface.

6. The lid of claim **1**, wherein the second planar surface is coplanar with the first planar surface.

7. The lid of claim **1**, wherein the first cavity is located closer to the straw hole than the second cavity.

8. The lid of claim **1**, wherein the second cavity side walls are constructed to exert compressive force on a food container when the food container is disposed of in the second cavity.

9. The lid of claim **1**, wherein the second cavity extends from a first edge of the footprint of the container lid to an opposite edge of the footprint of the container lid.

10. The lid of claim **1**, wherein the first cavity side walls are constructed to exert compressive force on a conventional condiment packet when the conventional condiment packet is disposed of in the first cavity.

11. The lid of claim **1**, wherein the outer coupling trough defines a plane and the second cavity side walls extend through the plane.

12. The lid of claim **1**, further comprising a stability structure comprising at least a portion of the second cavity side walls extending above the second planar surface.

13. The lid of claim **1**, wherein the second distance is greater than the first distance.

14. The lid of claim **1**, wherein the first cavity comprises a first opening and the second cavity comprises a second opening, wherein the first opening is smaller than the second opening.

* * * * *